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SPECIAL REPORTS, NO. 208

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FOR FURTHER TRAN

MONSEE

DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS

MONSEE SPECIAL PUBLICATION NO. 1

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SPECIAL COMMITTEE ON SOLAR-TERRESTRIAL PHYSICS

JOINTLY BY

AIR FORCE GEOPHYSICS LABORATORY

AND

WORLD DATA CENTER A FOR SOLAR-TERRESTRIAL PHYSICS

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Solar-terrestrial	Flare-associated events	
Monitoring	Geomagnetic variations	
Solar phenomena	Aurora	
Interplanetary phenomena	Cosmic rays	

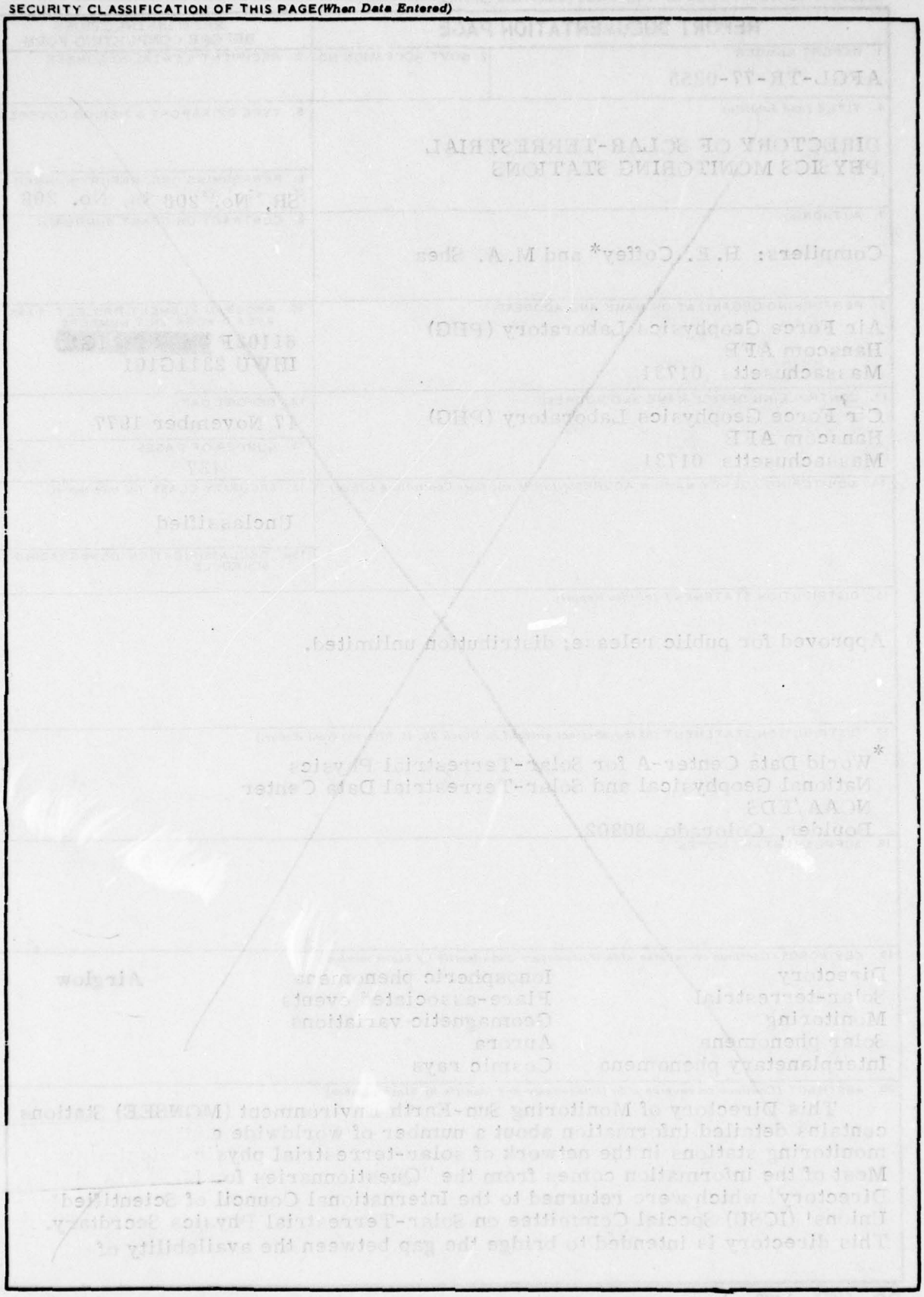
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This Directory of Monitoring Sun-Earth Environment (MONSEE) Stations contains detailed information about a number of worldwide continuously monitoring stations in the network of solar-terrestrial physics disciplines. Most of the information comes from the "Questionnaries for MONSEE Station Directory" which were returned to the International Council of Scientific Unions' (ICSU) Special Committee on Solar-Terrestrial Physics Secretary. This directory is intended to bridge the gap between the availability of

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20. Abstract (Continued)

continuously monitored solar-terrestrial data and the awareness of possible users of these data. The structured format of each station entry provides some degree of homogeneity, and when familiar with this format, certain information can be located at a glance. Some station entries are more detailed than others, but all identify an additional source for more information about the station and the data. A total of 1032 individual entries are included in this directory covering the following disciplines of solar-terrestrial physics monitoring: solar and interplanetary phenomena, ionospheric phenomena, flare-associated events, geomagnetic variations, aurora, cosmic rays, and airglow.

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FOR THE COMMANDER

John Howard

Chief Scientist

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PREFACE

The decision to compile and publish a directory of ground-based observing stations engaged in the monitoring of the solar-terrestrial environment was made at a meeting of the MONSEE Steering Committee in June, 1974. At the same time it was decided to computerize each of the entries, principally because it would enable updating the files and make it possible to maintain a current and accurate data listing of MONSEE activities. As with any project of such a magnitude, unanticipated delays were encountered in the establishing of this computer information file. Although the initial questionnaires were distributed to people engaged in the various ground-based monitoring programs in 1975, the system for actually computerizing the information was not finalized until 1976, at which time the information from each of the completed questionnaires was entered into the computer. In this regard, the efforts and careful work of Ms. Deborah A. Dunham of World Data Center A for Solar-Terrestrial Physics are most gratefully acknowledged.

The ideas, suggestions, and efforts of the members of the MONSEE Steering Committee are also very much appreciated. Since this project was initiated, several changes have been made in the membership of this committee, and, as such, it is appropriate to acknowledge the assistance of both past and present members as follows: V. Bumba, F.W. Jäger, E.P. Kharin, H. Maeda, T. Nagata, W.R. Piggott, G. Pillet, N.V. Pushkov, A.H. Shapley, P. Simon, H. Tanaka, D. van Sabben, and J.I. Vette.

Since in any rapidly evolving program changes are continually occurring, it is recognized that some of the entries in this directory may necessitate frequent updating. Consequently, we encourage the users of this directory to assist the

MONSEE program and the World Data Centers in their efforts to maintain a current information file on solar-terrestrial physics monitoring stations by notifying the World Data Centers of any mistakes they may find, changes that may occur, or additions to be made. Cooperation in this endeavor will assist users who may wish specific information from the data file and will also assist MONSEE in the rapid publication of future directories.

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INTRODUCTION

BACKGROUND

MONSEE is an acronym for Monitoring of the Sun-Earth Environment. This is the name given to the existing and continuing efforts for systematic observation and data exchange in solar activity, ionosphere, geomagnetism, aurora, airglow, cosmic rays, and related special fields. These observations and data are used for interdisciplinary research and applications, often by groups other than those who make the observations. In many cases, the primary data are used; in many others, it is the reduced or summary data or multi-station indices which are needed. Any individual or organization who gathers or utilizes monitoring type data in their work is considered a participant in the MONSEE program and is invited to participate in MONSEE activities.

The purpose of MONSEE is to maintain current information on the scientific programs in which various parameters of the environment are monitored. The goal of MONSEE is the expeditious collection, exchange, and distribution of solar-terrestrial data for use by all scientists to aid them in their various scientific analyses.

Most of the major monitoring networks have specific relationships to specialized commissions or committees of one of the scientific unions. The arrangements vary from case to case. MONSEE serves to bring these individual efforts together

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and provide an interdisciplinary focus. Thus, MONSEE is an interdisciplinary coordinating entity, not a superior entity.

The MONSEE Program is under the auspices of the Special Committee on Solar-Terrestrial Physics (SCOSTEP) of the International Council of Scientific Unions (ICSU). The Special Committee has four major program areas, as illustrated in Figure 1. Each program is guided by a Steering Committee appointed by the Bureau of the Special Committee which includes nominees by the scientific unions which cooperate in the work of the Special Committee. The MONSEE Steering Committee is composed of members appointed by the various scientific unions and COSPAR in addition to representatives from the World Data Centers and other related international organizations.

The foundation of the monitoring activities is the persistent, routine, high quality data observational programs of solar-terrestrial phenomena conducted in a number of countries by many institutions and individuals. The considerable effort necessary to carry out these observational programs is often not acknowledged; however, these monitoring efforts and the generous sharing of these data are absolutely essential for viable solar-terrestrial physics programs. Although spectacular space missions are usually in the limelight, it would be difficult to utilize these new and exciting observations to their fullest potential without the

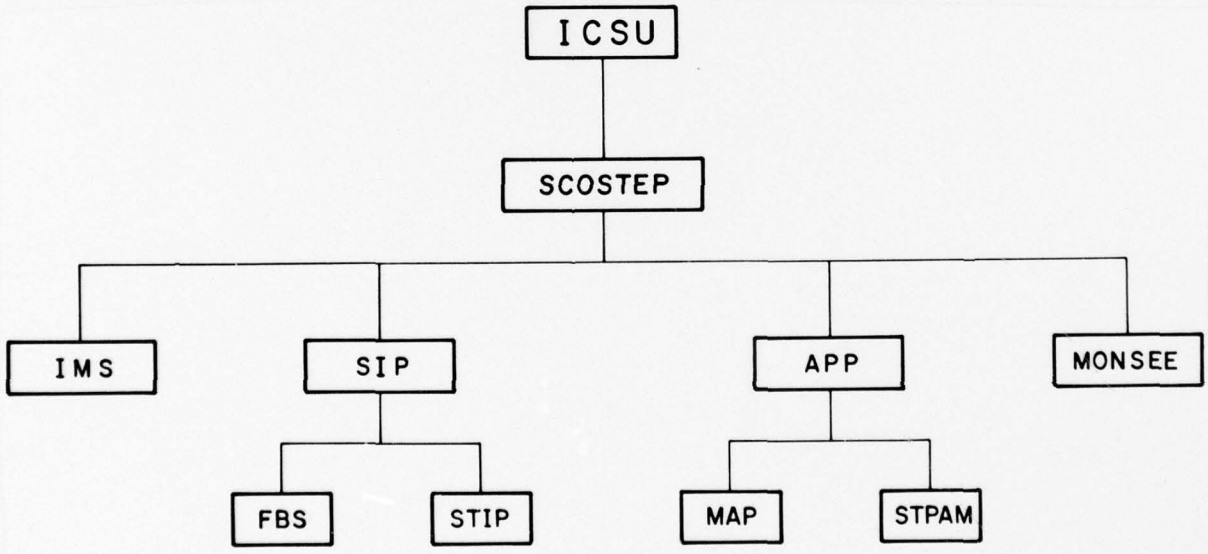


Figure 1. Organizational Chart for the Special Committee on Solar-Terrestrial Physics (SCOSTEP). The acronyms are as follows: ICSU (International Council of Scientific Unions); IMS (International Magnetospheric Study); SIP (Solar and Interplanetary Program); FBS (Flare Build-Up Study); STIP (Study of Travelling Interplanetary Phenomena); APP (Atmospheric Physics Program); MAP (Middle Atmosphere Program); STPAM (Solar-Terrestrial Physics and Meteorology); and MONSEE (Monitoring the Sun-Earth Environment)

correlative background measurements. In many cases it is difficult for a researcher in one specific field of solar-terrestrial physics to know exactly what correlative data may be available for a specific time period, or how to obtain these data in a time frame faster than these data are routinely deposited in the World Data Centers or in smaller time increments than routinely available through these channels. In an effort to bridge the gap between the availability of continuously monitored solar-terrestrial physics data and the awareness of possible users of these data, the MONSEE Steering Committee undertook compilation of this directory of monitoring stations. This directory contains detailed information about a number of worldwide continuously monitoring stations in the field of solar-terrestrial physics. Most of the information contained herein comes from the "Questionnaires for MONSEE Station Directory" which were returned to the SCOSTEP Secretary; other information came directly from the IMS Bulletin No. 2 (published by the SCOSTEP Secretariat, 1975).

This compilation is obviously not a complete listing of all existing solar-terrestrial physics continuously monitoring stations. If Questionnaires were not returned, no effort was made to include the information from the World Data Center A for Solar-Terrestrial Physics archives. Also, some Questionnaires that were returned are not included in this directory. These include closed stations, research-oriented stations, future stations, and other miscellaneous discipline stations not deemed appropriate for this compilation.

SOLAR-TERRESTRIAL PHYSICS DATA CATEGORIES

The various types of solar-terrestrial physics data have been categorized as shown in Table 1. Details of the various types of data and the recommended inputs to the World Data Centers are given in the Third Consolidated Guide to International Data Exchange through the World Data Centres (issued by the Secretariat of the ICSU Panel on World Data Centres, Washington, December 1973). The categories given in Table 1 are referred to by their appropriate letter and number designating their subdisciplines throughout this MONSEE station directory.

ARRANGEMENT OF THE DIRECTORY

Section 2 of this directory contains an alphabetical listing of all stations engaged in solar-terrestrial physics monitoring activities and included in this directory. This listing includes the station name, the identification letter and number designating the subdiscipline of solar-terrestrial monitoring activity conducted,

Table 1. Data Categories in Solar-Terrestrial Physics

A. Solar and Interplanetary Phenomena (other than flare-associated events treated in section C).

A.1 Sunspot Positions, Areas, and Classification
A.2 Sunspot Numbers
A.3 Solar Magnetic Fields
A.4 H-alpha Observations (other than flares)
A.5 Calcium Plages: Positions, Areas, Maximum Intensities
A.6 Combined and Special Optical Observations (Solar Maps, Prominences, Filaments)
A.7 Optical Observations of the Corona
A.8 Total Radio Flux Measurements
A.9 Radio and Radar Maps of Solar Disk
A.10 Radio East-West Scans of Solar Disk
A.11 Solar X-ray and UV Background Levels
A.12 Energetic Solar Protons and Solar Electrons
A.13 Solar Wind
A.14 Comet Tails, Interplanetary Scintillations, Zodiacal Light
A.15 Sporadic Radio Emissions from Jupiter
A.16 Monitoring of Total Solar Radiation
A.17 Interplanetary Magnetic Fields
A.18 Interplanetary Electric Fields

B. Ionospheric Phenomena (other than flare-associated events treated in section C).

B.1 Ionosphere Vertical Soundings
B.2 Topside-Vertical Incidence Soundings and Satellite Probe Data
B.3 Incoherent Scatter Sounding
B.4 Oblique Incidence Soundings
B.5 Ionospheric or Aeronomical Rockets
B.6 Total Electron Content - Satellite Beacons
B.7 Absorption - Method A1 (pulse echo)
B.8 Absorption - Method *A2 (riometer)*
B.9 Absorption - Method A3 (CW Field-strength)
B.10 Ionospheric Drifts
B.11 Ionospheric Scintillations from Satellite Beacons
B.12 Ionospheric Back- and Forward-Scatter
B.13 Whistlers and VLF Emissions
B.14 Atmospheric Radio Noise
B.15 Partial Reflection Data
B.16 Reference Ionospheric Models

C. Flare-Associated Events

C.1 H-alpha Flares
C.2 Solar Magnetic Field in Active Regions and Their Short-Term Changes
C.3 Solar Radio Events, Fixed Frequency
C.4 Solar Radio Spectrograms of Events
C.5 Solar X-ray Observations
C.6 Sudden Ionospheric Disturbances - Ground-Based Observations
C.7 Solar Protons and Electrons - Direct Measurement
C.8 Solar Protons - Riometer
C.9 Solar Protons - Ionospheric Vertical Incidence Soundings
C.10 Solar Protons and Electrons - VHF Forward Scatter
C.11 Solar Protons - Other Types of Measurements
C.12 Solar, Ionospheric, or Aeronomical Rockets Launched During an Event
C.13 Cosmic Ray Ground Level Increases

D. Geomagnetic Variations

D.1 Standard and Rapid Run Measurements
D.2 Magnetospheric Micropulsation Phenomena
D.3 Space Magnetism
D.4 Magnetospheric Particles
D.5 Measurement of Magnetosphere by Whistler and VLF Emissions

E. Aurora

E.1 All-sky Camera
E.2 Visual Observations
E.3 Other Optical Techniques (e.g. spectra)
E.4 Radio and Radar Observations

F. Cosmic Rays

F.1 Neutron Monitors and Supermonitors
F.2 Ionization Chambers
F.3 Meson Telescope (cubical, crossed, narrow angle and wide angle)
F.4 Balloon Measurements
F.5 Aircraft and Ship Measurements

G. Airglow

H. Miscellaneous

H.1 Noctilucent Clouds
H.2 Meteorological Rockets
H.3 Atmospheric Ozone
H.4 Special Interdisciplinary Projects
H.5 Record of Sounding Rocket Launchings

the geographic coordinates for each subdiscipline (in some cases sensors are located at remote sites from the principal observing location but still referred to by the same geographic name), and an item number for ease in referencing the material in the computer file.

Section 3 contains a list of names for stations known by more than one name. The station name, as given in the individual station entry, is on the left hand side of each group, while the equivalent name (or names) is given on the right hand side.

Section 4 contains listings of stations and geographic coordinates, arranged by subdisciplines. The solar observations are arranged in order of increasing geographic longitude; the other observations are given in order of increasing geographic latitude (South Pole to North Pole).

Section 5 contains 14 illustrations of world maps upon which triangles denote the locations of stations where selected observations are being conducted. Maps are given for the following subdisciplines:

A01, A02 (Sunspot Positions, Areas, Classifications and Sunspot Numbers)

A05, A06, A07 (Calcium Plages, Solar Maps, Prominences, Filaments, and Optical Observations of the Corona)

B01 (Ionosphere Vertical Soundings)

B06 (Total Electron Content - Satellite Beacons)

B07, B08, B09 (Ionospheric Absorption - Methods A1, A2, and A3 - Pulse Echo, Riometer, and CW Fieldstrength, respectively)

B13 (Whistlers and VLF Emissions)

C01 (H-Alpha Flares)

C03, C04 (Solar Radio Events, Fixed Frequency, and Solar Radio Spectrograms of Events)

C06 (Sudden Ionospheric Disturbances)

D01 (Geomagnetic Standard and Rapid Run Measurements)

E01, E03, E04 (All-sky Camera, Other Optical Techniques, Radio and Radar Observations). Both North Polar and South Polar projections are given.

F01, F02, F03, F04 (Neutron Monitors, Supermonitors, Ionization Chambers Meson Telescopes and Balloon Measurements)

G01 (Airglow)

Section 6 contains the principal section of this directory, specifically the replies to the "Questionnaires for MONSEE Station Directory." These entries are arranged by subdiscipline and are given approximately four to a page. A standard format is used throughout this section; incomplete entries indicate that the information was not given on the returned questionnaire. Although information about each station varies in detail, each entry identifies an additional source for more information about the station and the data. The name of the station, the computer item number, and the date that the completed questionnaire was received are

given in the top line of each individual entry. The remainder of the information is given in the following format:

Discipline
Station Latitude
Station Longitude
Alternate Names (if any)
Dates of Operation (including whether station ever moved)
Observing Schedule
Instrument Description
Raw Data (form of raw data holdings)
Data Reduction Practice (regular, special or none)
Regular Reduced Data Available After _____ Months
Form of Reduced Data
Data Routinely Published (name of publication, if any)
Data Sent to WDC-A (yes or no)
Data Sent to WDC-B (yes or no)
Data Sent to WDC-C (yes or no)
Address for Information about Station
Address for Information about Data
Additional Comments

CORRECTIONS AND UPDATING

As mentioned previously, the information given in Section 6 of this directory has been computerized primarily because it would enable updating the files and make it possible to maintain a current and accurate data listing of MONSEE activities. User cooperation in this endeavor is not only encouraged, but also necessary.

Corrections and updates to the existing station entries can be handwritten on a copy of the appropriate page in this publication. New input to the directory can be entered on the formatted page in Section 7 of this document. Changes such as these, or information such as the termination of a specific program, should be sent to the SCOSTEP Secretary, c/o National Academy of Sciences, 2101 Constitution Avenue, N.W., Washington, D.C. 20418, USA. It is anticipated that updates to this station directory will be issued at future intervals to be decided by the MONSEE Steering Committee.

2. ALPHABETICAL LISTING OF STATIONS (SUBDISCIPLINES NOTED)

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STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST	ITEM
ABERDEEN	G01	57.15	357.87	1
ADDIS ABABA	D02	9.03	38.77	2
ADELAIDE	G01	-34.60	138.40	777
ADELAIDE ISLAND	D01	-67.76	291.08	3
AHMEDABAD	B01	23.00	72.60	730
	B07	23.00	72.60	4
	B08	23.01	72.60	734
	B13	23.01	72.60	736
	B15	23.01	72.60	735
	C03	23.01	72.60	732
	C04	23.01	72.60	731
	D01	23.01	72.60	737
	F01	23.01	72.60	738
	F03	23.01	72.60	733
AKITA	B01	39.73	140.14	5
	B09	39.73	140.14	6
ALERT	F01	82.50	297.67	8
	D01	82.50	297.50	7
	F03	82.50	297.67	9
ALIBAG	D01	18.64	72.87	10
ALMA ATA	B01	43.25	76.92	831
	D01	43.25	76.92	832
	F01	43.25	76.92	11
	F03	43.25	76.92	13
	F04	43.25	76.92	15
	F04	43.25	76.92	14
ALMERIA	D01	36.85	357.54	16
AMBERLEY	D01	-43.16	172.75	17
ANDOYA	B08	69.29	16.02	18
	D01	69.29	16.02	19
ANGMAGSSALIK	B08	65.61	322.34	721
ANNAMALAINAGAR	D01	11.37	79.68	20
APATITY	D01	67.55	33.30	786
	F01	67.50	33.33	21
	F03	67.50	33.33	22
APIA	D01	-13.80	188.22	23
ARCETRI	A04	43.75	11.25	1079
	A08	43.75	11.25	1083
	B06	43.75	11.25	1081
	B11	43.75	11.25	1082
	C01	43.75	11.25	1080
	C03	43.75	11.25	1084
	C06	43.75	11.26	24
ARCTIC VILLAGE	F01	68.13	214.43	26
	D01	68.13	214.43	25
ARECIBO	B03	18.35	293.25	29
	B06	18.35	293.25	30
	G01	18.35	293.25	31

STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST	ITEM
ARECIBO (Cont.)	G01	18.35	293.25	207
ARGENTINE ISLANDS	B01	-65.25	295.73	27
	D01	-65.25	295.73	28
ARMIDALE	B06	-30.50	151.50	32
ARRIVAL HEIGHTS	E01	-77.83	166.65	545
	E03	-77.83	166.65	547
	E03	-77.83	166.65	546
ASHKHABAD	B01	37.93	58.37	847
	B07	37.93	58.37	846
	B10	37.93	58.37	845
	D01	37.90	58.40	848
	G01	37.90	58.40	844
ASPENDALE	G01	-38.02	145.07	33
ATHENS	A01	37.85	23.72	206
	A02	37.85	23.72	1145
	A04	37.85	23.72	1146
	A06	37.85	23.72	1147
	A08	37.85	23.72	1148
	B06	37.85	23.72	1149
	C01	37.85	23.72	1150
	C03	37.85	23.72	1151
	C06	37.85	23.72	1152
	F01	37.96	23.70	784
ATIBAIA, ITAPETINGA	B13	-23.50	313.50	36
	C03	-23.50	313.50	1078
AUCKLAND	B01	-37.00	175.00	38
	B06	-37.00	175.00	40
	B08	-37.00	175.00	808
	D02	-36.51	174.45	41
BAGNERES	F01	43.08	.15	42
BAGUIO	A01	16.41	120.63	44
	A16	16.42	120.60	43
	D01	16.41	120.58	45
BAKER LAKE	D01	64.33	263.97	46
BALERMA	B01	36.75	357.17	47
BANGUI	D01	4.44	18.56	48
BARROW	D01	71.30	203.25	49
BATTELLE	E03	46.40	240.40	489
BEAR ISLAND	B08	74.50	19.20	709
	B13	74.50	19.20	710
	D01	74.51	19.02	50
BEKESCSABA	B01	46.67	21.17	73
BELEM	B13	1.39	311.56	1032
	B14	1.39	311.56	1034
	C06	1.39	311.56	1033
BELGRANO	B01	-77.97	321.20	51
	B13	-77.97	321.20	52
BELSK	B06	51.84	20.79	54
	B08	51.84	20.79	55
	B11	51.84	20.79	916
	C06	51.84	20.79	917
BERMUDA	B13	32.26	295.12	1011
	B14	32.26	295.12	1013
	C06	32.26	295.12	1012

STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST	ITEM
BEVERIDGE	B01	-37.47	144.93	56
	B08	-37.47	144.93	772
	G01	-37.47	144.93	771
BIG BEAR	C01	34.16	243.49	57
	C01	34.16	243.49	58
	C02	34.16	243.49	59
BINZA	D01	-4.37	15.25	61
BOROK	D01	58.02	38.20	856
	D02	58.03	38.33	837
	D02	58.03	38.97	773
BOULDER	A01	39.98	254.72	64
	A02	39.98	254.72	920
	A04	39.98	254.72	927
	A06	39.98	254.72	928
	A08	40.10	254.75	63
	A11	39.98	254.72	921
	A12	39.98	254.72	922
	B01	40.03	254.70	66
	B13	40.00	254.74	1026
	B14	40.00	254.74	1028
	C01	39.98	254.72	929
	C02	39.98	254.72	930
	C03	40.10	254.75	919
	C05	39.98	254.72	923
	C06	40.00	254.74	1027
	C07	39.98	254.72	924
	D01	40.13	254.77	68
	D02	40.14	254.76	69
	D02	39.98	254.72	925
	D03	39.98	254.72	926
BRISBANE	B01	-27.53	152.91	70
	F01	-27.53	152.92	712
	G01	-27.50	152.90	71
BRUXELLES	B06	50.50	4.20	704
	B08	50.50	4.20	703
BUCHAREST	A01	44.41	26.05	72
	A02	44.41	26.05	931
	A04	44.41	26.05	932
	C01	44.41	26.05	933
BUDAPEST	F03	47.49	18.96	740
BUDKOV	D01	49.07	14.02	819
	D02	49.07	14.02	820
BUENOS AIRES	A01	-34.55	301.27	74
	A02	-34.55	301.27	75
	A04	-34.55	301.27	76
	A08	-34.55	301.27	828
	B01	-34.50	301.50	818
	B07	-34.50	301.50	817
	C01	-34.55	301.27	934
	C03	-34.55	301.27	827
CACHOEIRA PAULISTA	B01	-22.70	314.98	533
	D01	-22.88	314.61	535
	G01	-22.70	314.80	536
CALGARY	F01	51.08	245.90	790

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
CAMBRIDGE BAY	D01	0.	255.00	78
CAMDEN	D02	-32.75	151.50	716
CAMPBELL ISLAND	B01	-52.60	169.10	79
	B13	-52.50	169.20	80
	D02	-52.50	169.20	81
	E01	-52.25	169.15	82
	E02	-52.55	169.15	83
CANBERRA	B01	-35.31	149.00	84
	D01	-35.29	149.30	86
	D01	-35.31	149.00	85
CAPE ZEVGARI	B01	34.58	32.95	87
CAPRI F	A04	40.55	14.22	768
	A06	40.55	14.22	770
	C01	40.55	14.22	769
CASEY	B01	-66.29	110.53	89
	B08	-66.29	110.53	90
	D01	-66.54	110.36	91
	D02	-66.54	110.36	92
	E01	-66.54	110.36	93
	E04	-66.54	110.36	94
CASTLE ROCK	D01	37.23	237.87	95
CATANIA	A01	37.50	15.08	99
	A02	37.50	15.08	100
	A04	37.50	15.08	101
	A05	37.50	15.08	96
	A06	37.50	15.08	935
	C01	37.50	15.08	97
CATARMAN	A16	12.52	124.67	98
CHACALTAYA	F01	-16.35	291.87	102
	F03	-16.31	291.80	103
	B03	65.10	212.55	104
	B08	65.10	212.57	106
	E01	65.10	212.57	107
CHELYUSKIN	E01	77.80	104.30	877
CHICHIJIMA	D01	27.09	142.18	108
	D02	27.09	142.18	111
CHRISTCHURCH	B01	-43.55	172.75	112
CHUBU	B13	35.27	137.01	966
	B14	35.27	137.01	963
	C03	35.27	137.01	964
	C06	35.27	137.01	965
CHUNG-LI	B01	24.95	121.23	113
CHURCHILL	B01	58.70	265.80	114
CLARK LAKE	A14	33.34	243.72	116
CLIMAX	F01	39.37	253.82	117
COLLEGE	B08	64.87	212.18	203
	B12	64.86	212.15	204
	D01	64.86	212.15	119
	D01	64.87	212.17	118
	D01	18.20	293.85	205
	D02	64.86	212.15	121
	D02	64.86	212.17	120
	E01	64.86	212.15	124
	E04	64.87	212.18	122

STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST	ITEM
COLOMBO	B07	6.90	79.87	125
CONCEPCION	B01	-36.78	286.88	126
COPENHAGEN	D01	55.85	12.45	783
CULGOORA	C01	-30.33	149.57	129
	C03	-30.32	149.57	130
	C04	-30.32	149.57	936
DAKAR	B01	14.76	342.58	131
DANMARKSHAVN	B08	76.77	341.37	722
DAR ES SALAAM	D01	-6.77	39.22	133
DAVAO	D01	7.08	125.58	134
DAVIS	B08	-68.58	77.96	136
	B08	-68.58	77.96	135
	B13	-68.58	77.96	137
	C08	-68.58	77.96	937
	D01	-68.58	77.96	138
	D02	-68.58	77.96	139
	E01	-68.58	77.96	140
DE BILT	B01	52.10	5.18	141
	B07	52.10	5.18	142
	B09	52.10	5.18	143
	B10	52.10	5.18	144
DEEP RIVER	F01	46.10	282.50	145
	F03	46.10	282.50	146
DENVER	F01	39.75	255.00	147
	F03	39.75	255.00	1052
DIXON	E01	73.50	80.40	876
DJIBOUTI	B01	11.51	42.83	148
	B08	11.52	42.83	150
DOLGOSCHELIE	B09	66.03	43.24	794
DOMBAS	D01	62.07	9.12	151
DOURBES	B01	50.10	4.60	152
	B07	50.10	4.60	938
	B08	50.10	4.60	702
	D01	50.10	4.60	824
	F01	50.10	4.60	153
	F01	50.10	4.60	0
	F03	50.10	4.60	701
DUMONT DURVILLE	E02	-66.67	140.00	1055
	E03	-66.67	140.00	1056
	G01	-66.67	140.00	1057
DUNEDIN	B13	-45.79	170.48	154
	D02	-45.79	170.48	155
DURHAM	F01	43.10	289.17	157
DURNTEN	C03	47.38	8.85	158
	C04	47.28	8.85	159
DWINGELOO	A08	52.81	6.40	1085
	C03	52.81	6.40	1086
	C04	52.81	6.40	1087
EARLYBURN	D02	55.73	356.77	1088
EBRO	A01	40.32	.49	618
	A02	40.82	.49	619
	A04	40.82	.49	620
	A16	40.82	.49	621
	B01	40.82	.49	622

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
EBRO (Cont.)	B06	40.82	.49	623
	B09	40.82	.49	624
	B14	40.82	.49	625
	C01	40.82	.49	1062
	C06	40.82	.49	1063
	D01	40.82	.49	626
	D02	40.82	.49	627
EIELSON AFB	D01	64.70	213.00	1107
EL ARENOSILLO	B01	37.10	353.25	160
	B06	37.10	353.25	161
EL LEONCITO	G01	-31.80	290.70	762
EMBUDO	F03	35.20	253.32	164
ESKDALEMUIR	D02	55.32	356.80	166
	F03	55.32	356.80	165
ESKIMO POINT	D01	61.10	265.93	168
EUSEBIO	D01	-3.88	321.57	171
FORT CHURCHILL	D01	58.80	265.90	115
FORT SMITH	D01	60.00	248.00	174
FORT YUKON	B12	66.57	214.75	176
	D01	66.56	214.78	177
	B08	66.56	214.78	175
	E01	66.56	214.78	179
	E01	66.56	214.78	178
FORTALEZA	B01	-3.75	321.05	172
FREDERICKSBURG	D01	38.20	282.63	181
	D01	38.20	282.63	180
FUERSTENFELDBRUCK	D01	48.17	11.28	182
	D02	48.17	11.28	183
FUJIGANE	A14	35.41	138.61	779
FUKUSHIMA	F01	37.75	140.48	184
GARCHY	B01	47.28	3.07	187
	B10	47.28	3.07	188
GENERAL BELGRANO	B08	-77.97	321.20	910
	D01	-77.97	321.20	911
	E01	-77.97	321.20	912
	E02	-77.97	321.20	913
	E03	-77.97	321.20	914
	F01	-77.97	321.20	915
GENOVA	B07	44.55	8.95	747
	B09	44.55	8.95	748
GENOVA-MT. CAPELLINO	B01	44.60	9.00	491
GILLAM	D01	56.35	265.32	190
GNANGARA	D01	-31.78	115.95	202
GODHAVN	B01	69.30	306.50	729
	B08	69.30	306.17	725
GODTHAB	B08	64.19	308.27	723
GOOSE BAY	B01	53.32	299.54	208
	B06	55.33	299.50	209
	F01	53.27	299.60	210
	F03	53.27	299.60	211
GRAHAMSTOWN	B01	-33.27	26.53	212
	B04	-33.27	26.53	939
	D01	-33.32	26.50	213
GRAZ	B01	47.10	15.50	214

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
GRAZ (Cont.)	B06	47.10	15.50	215
GREAT WHALE RIVER	D01	55.30	282.25	217
	D02	55.26	282.22	218
GUAM	D01	13.59	144.87	220
	D01	13.59	144.87	219
GULMARG	C06	34.07	74.42	940
	F01	34.07	74.42	221
HAIFA	B06	32.87	35.09	222
	B11	32.87	35.09	941
HALEAKALA	A04	20.71	203.74	223
	A06	20.71	203.74	224
	A07	20.71	203.74	225
	C01	20.71	203.74	226
HALLEY BAY	B01	-75.52	333.37	227
	B08	-75.52	333.37	228
	B13	-75.52	333.30	229
	B13	-75.52	333.37	231
	B13	-75.52	333.37	230
	C06	-75.52	333.37	942
	C08	-75.52	333.37	943
	D01	-75.52	333.22	232
	D02	-75.52	333.22	233
	E01	-75.52	333.22	234
HAMBURG	A01	53.64	9.96	235
	A02	53.64	9.96	944
HAMILTON	A08	42.25	289.00	945
	B06	42.25	289.00	237
	C03	42.25	289.00	236
HARTEBEESTHOEK	D01	-25.88	27.71	238
HARTLAND	D01	50.99	355.52	239
	D02	51.00	355.52	241
	D02	50.99	355.52	240
HARVARD	C04	62.07	9.12	173
HAUTE PROVENCE	C01	43.93	5.72	242
	G01	43.92	5.72	243
HEISS ISLAND	D02	80.62	58.05	839
	E01	80.70	56.20	878
HERMANUS	B01	-34.42	19.23	244
	B08	-34.42	19.22	245
	B13	-34.42	19.23	246
	B14	-34.42	19.22	247
	D01	-34.42	19.22	248
	D01	-34.42	19.22	249
	D02	-34.42	19.22	250
	D02	-34.42	19.23	1157
	F01	-34.42	19.22	256
HESTMONA	B13	66.53	12.85	1014
	B14	66.53	12.85	1016
	C06	66.53	12.85	1015
HIRAISO	A08	36.37	140.63	258
	B07	36.37	140.63	259
	B08	36.37	140.63	260
	B09	36.37	140.63	261

STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST	ITEM
HIRAISO (Cont.)	C03	36.37	140.63	950
	C06	36.37	140.63	951
HOBART	B01	-42.91	147.31	262
	B13	-42.50	147.20	251
	F01	-42.92	147.20	713
	F03	-42.92	147.20	715
	G01	-42.90	147.20	1156
HONG KONG	B01	22.33	114.20	264
	B06	22.33	114.20	265
	B11	22.28	114.13	952
	D01	22.36	114.22	267
	F02	22.42	114.20	269
HONOLULU	D01	21.32	201.99	270
HUANCAYO	F01	-12.03	284.67	271
HURBANOVO	A02	47.87	15.21	954
	A04	47.87	15.21	953
	A06	47.87	15.21	955
HURBANOVO	C01	47.87	15.21	273
	D01	47.87	18.18	807
HYDERABAD	D01	17.42	78.55	274
IBADAN	B01	7.40	3.90	275
	B06	7.40	3.90	276
INUBO	B13	35.70	140.85	776
	C06	35.70	140.86	277
INUVIK	B08	68.25	226.70	278
	D01	68.25	226.70	279
	E01	68.25	226.70	280
	F01	68.35	226.28	281
	F03	68.35	226.28	282
INVERCARGILL	B06	-46.40	168.40	283
IRKUTSK	A03	52.47	104.03	860
	A08	52.47	104.03	859
	B01	52.47	104.03	861
	B10	52.47	104.03	862
	C03	52.47	104.03	858
	D01	52.17	104.45	865
	F01	52.47	104.03	872
	F03	52.47	104.03	873
IZMIRAN	F01	55.47	37.32	853
JAIPUR	D01	26.92	75.79	285
JICAMARCA	B03	-11.95	283.13	286
JOHANNESBURG	B01	-26.10	28.10	287
JULIUSRUH/RUGEN	B01	54.63	13.38	288
	B07	54.63	13.38	956
JUNGFRAUJOCH	F01	46.55	7.98	289
KAGOSHIMA	B13	31.48	130.71	290
KAKIOKA	D01	36.23	140.21	291
	D02	36.23	140.19	292
KALINGRAD	B01	54.70	20.62	854
KANDILLI	A01	41.06	29.06	293
	A02	41.06	29.06	957
	A04	41.06	29.06	958
	A05	41.06	29.06	959
	C01	41.06	29.06	960

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG	ITEM
KANDILLI (Cont.)	D01	41.06	29.06	294
KANOYA	D01	31.42	130.88	295
	D02	31.42	130.88	296
KANZELHOEHE	A01	46.68	13.91	297
	A02	46.68	13.91	961
	A04	46.68	13.91	298
	C01	46.68	13.91	962
KAP TOBIN	B08	70.42	338.03	720
KARAGANDA	B01	49.81	73.08	835
	D01	49.81	73.08	836
KARAVIA	D01	-11.65	27.47	163
KASHIMA	B02	35.95	140.67	299
	B13	35.95	140.65	300
KASUGAI	A08	35.27	137.01	301
KEM	D01	65.00	34.40	785
KENORA	B01	49.79	265.51	671
KERGUELEN	B01	-49.35	70.24	302
	B08	-49.35	70.27	303
	B13	-49.44	70.42	304
	D02	-49.44	70.42	306
	F01	-49.35	70.25	308
KIEL	F01	54.30	10.10	309
KIEV	B01	50.72	30.30	850
	D01	50.72	30.30	849
	F01	50.72	30.30	851
KINGSTON	B14	41.31	288.27	311
	D02	41.31	288.27	970
KIRUNA	B01	67.80	20.40	312
	B04	67.80	20.40	971
	B08	67.84	20.42	313
	B13	67.83	20.42	314
	D01	67.83	20.42	315
	E01	67.84	20.42	316
	E03	67.84	20.42	317
	E04	67.83	20.33	318
KISLOVODSK	A01	44.70	42.50	320
	A03	44.70	42.50	972
	A04	44.70	42.50	973
	A05	44.70	42.50	974
	A06	44.70	42.50	975
	A07	44.70	42.50	976
	A08	44.70	42.50	977
	C03	44.70	42.50	978
KISO	G01	35.80	137.63	321
KITT PEAK	A03	31.96	248.40	322
	A06	31.96	248.40	979
	C02	31.96	248.40	980
KODAIKANAL	B01	10.20	77.50	765
	B09	10.20	77.50	766
	C01	10.20	77.50	764
	D01	10.23	76.95	323
KOKUBUNJI/TOKYO	B01	35.71	139.49	324
KUHLUNGSBORN	B09	54.12	11.77	325
	B10	54.12	11.77	981

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
KUHLUNGSBORN (Cont.)	B14	54.12	11.77	982
	C06	54.12	11.77	983
	E04	54.12	11.77	984
L AQUILA	D01	42.38	13.31	332
	D02	42.38	13.31	333
LA JOLLA	A14	32.51	242.58	326
LA MOURE	B13	46.56	261.36	1023
	B14	46.56	261.36	1025
	C06	46.56	261.36	1024
LA PAZ	A08	-16.30	291.91	329
	C03	-16.30	291.91	330
LA POSTA	A08	32.40	243.50	985
	A09	32.40	243.50	331
	B01	32.40	243.50	986
	B04	32.40	243.50	987
	B09	32.40	243.50	988
	C03	32.40	243.50	989
	C06	32.40	243.50	990
	D01	32.40	243.50	991
LANNION	B01	48.75	356.55	327
	B06	48.68	356.50	328
LAS ACACIAS	D01	-35.00	302.32	753
LATROBE	C06	40.28	280.72	334
LAUNCESTON	D02	-41.67	147.16	335
LAUREL RIDGE	G01	40.16	280.84	767
LEEDS	F01	53.82	358.40	336
LEICESTER	B10	52.00	359.00	340
	B13	52.00	359.00	338
LEIRVOGUR	D01	64.18	338.30	341
	D01	64.18	338.30	342
LENINGRAD	D01	59.56	30.16	857
	E03	59.95	30.70	787
LERWICK	D01	60.13	358.82	343
	D02	60.10	358.82	345
	D02	60.13	358.82	344
LINDAU	B12	51.65	10.13	351
LINDAU/HARZ B 103	B01	51.65	10.12	348
LITTLETON	C06	39.63	255.02	350
LOGRONO	D01	42.45	357.50	352
LOMNICKY STIT	A06	49.18	20.22	353
	A07	49.18	20.22	992
	F01	49.20	20.22	355
	G01	49.18	20.22	356
LONDON (ONTARIO)	B06	42.59	278.86	357
LORING AFB	D01	46.95	292.12	358
LOS BANOS	A16	14.22	121.25	359
LOUVAIN-LA-NEUVE	B06	50.75	4.57	360
LOWELL	A16	35.20	248.34	361
LUANDA	A02	-8.79	13.31	362
LUCKY LAKE	D01	51.15	252.74	363
LUECHOW	B09	53.00	11.20	364
LUNPING	A01	25.00	121.17	365
	A02	25.00	121.17	994
	B09	25.00	121.17	367

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
LUNPING (Cont.)	D01	25.00	121.17	366
LVOV	D01	49.90	23.75	830
LYCKSELE	B01	64.62	18.67	368
	B08	64.62	18.67	369
	D01	64.62	18.67	370
	E01	64.62	18.67	371
	E03	64.62	18.76	372
	E03	64.62	18.67	373
MACQUARIE ISLAND	B08	-54.50	158.95	374
	D01	-54.50	158.95	376
	D01	-54.50	158.95	378
	D02	-54.50	158.95	377
	D02	-54.50	158.95	379
	E01	-54.50	158.95	380
MAGADAN	D01	60.00	151.00	868
MAKAPUU PT	B13	21.31	202.35	1020
	B14	21.31	202.35	1022
	C06	21.31	202.35	1021
MALVERN	B03	52.13	357.67	381
MANILA	A01	14.64	121.08	383
	A01	14.65	121.07	382
	A01	14.52	121.00	388
	A02	14.65	121.07	995
	A04	14.64	121.08	384
	A04	14.64	121.08	385
	A05	14.64	121.08	996
	A06	14.64	121.08	997
	A08	14.64	121.08	389
	A16	14.65	121.06	386
	A16	14.64	121.08	387
	C01	14.64	121.08	999
	C01	14.64	121.08	998
	C03	14.64	121.08	1000
	C04	14.64	121.08	1001
	D01	14.64	121.08	390
	D02	14.64	121.08	1002
MARINA	D01	36.47	353.80	532
MARION	D01	-46.88	37.85	392
MARION ISLAND	B01	-46.85	37.87	391
MAUI	B01	20.83	203.53	393
MAUNA LOA	A06	19.53	155.58	1003
	A07	19.53	155.58	394
MAWSON	B01	-67.60	62.88	689
	B08	-67.60	62.88	690
	B09	-67.60	62.90	793
	D01	-67.60	62.86	692
	D01	-67.60	62.86	691
	E01	-67.61	62.88	693
	E04	-67.61	62.88	1102
	F01	-67.60	62.80	714
	F03	-67.60	62.80	823
MBOUR	D01	14.39	343.04	1103
MCMATH-HULBERT	A01	42.66	276.74	1073
	A04	42.66	276.74	1074

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
MCMATH-HULBERT (Cont.)	A05	42.66	276.74	1075
	B08	42.66	276.74	1100
	C01	42.66	276.74	1076
	C06	42.66	276.74	1077
	D01	42.66	276.74	1101
MEANOOK	D01	54.62	246.67	1104
MEMAMBETSU	D01	43.91	144.19	395
	D02	43.91	144.19	396
MEUDON	A03	48.80	2.25	397
	A04	48.80	2.23	398
	A04	48.80	2.23	399
	A05	48.80	2.23	1004
	A06	48.80	2.23	1005
	C01	48.80	2.23	1006
	C01	48.80	2.23	400
MEXICO	B01	19.43	260.30	401
	F01	19.33	260.82	402
	F03	19.33	260.82	1007
MILLSTONE HILL	B01	42.61	288.51	403
	B03	42.62	288.51	404
MINSK PLESHCHENITSY	D01	53.90	27.50	875
MIRNY	B08	-66.60	93.00	882
	D02	66.58	93.02	838
	E01	-66.60	93.00	879
	F04	-66.57	92.92	405
MIYAZU	D01	35.32	135.11	406
MORIOKA	F01	39.70	141.13	407
MOSCOW	B01	55.47	37.32	852
	D01	55.41	37.41	855
	F04	55.93	37.52	408
MOSHIRI	B13	44.36	142.27	409
	B13	44.36	142.27	410
MOULD BAY	B08	76.20	240.60	411
	D01	76.20	240.60	412
	E01	76.20	240.60	413
MT NORIKURA	A07	36.11	137.55	414
	F01	36.11	137.55	415
	F02	36.11	137.55	416
	F03	36.11	137.55	417
MT WASHINGTON	F01	44.30	288.70	418
MULEMBA	A01	-8.79	13.31	993
MUNDARING	B01	-31.98	116.21	419
	D02	-32.00	116.20	420
MUNTINLUPA	D01	14.38	121.02	421
MURMANSK	C07	68.95	33.05	422
	F04	68.95	33.05	1008
MURPHY DOME	E01	64.50	211.45	423
NAGOYA	F03	35.15	136.97	424
NAGYCENK	D01	47.63	16.72	425
	D02	47.63	16.72	426
NAIROBI	B01	-1.28	36.83	427
	D01	-1.33	36.81	428
NANCAY	A09	44.40	2.20	432
	A10	47.38	.15	430

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
NANCAY (Cont.)	A10	47.38	.15	431
	A10	47.38	.15	429
	C03	44.40	2.20	433
NARSSARSSUAQ	B01	61.20	314.60	727
	B08	61.20	314.60	724
NEWCASTLE	D02	32.75	151.50	434
NEWPORT	D02	48.26	242.88	435
NGOYA	D02	-28.83	31.88	760
NIEMEGK	D01	52.07	12.68	1009
	D02	52.07	12.68	1010
NIIGATA	G01	37.70	138.82	739
NISHINOMIYA	C06	34.72	135.38	438
NOBEYAMA	A10	35.93	138.48	440
	A10	35.93	138.48	439
	C04	35.93	138.48	441
NORFOLK	B13	36.82	285.71	1035
	B14	36.82	285.71	1037
	C06	36.82	285.71	1036
NORFOLK ISLAND	B01	-29.03	167.97	442
NORILSK	B01	69.00	88.00	863
	B08	69.00	88.00	864
	F01	69.00	88.00	874
NORWAY HOUSE	D01	53.98	262.17	443
NOVOKAZALINSK	B01	45.76	62.12	833
	D01	45.76	62.12	834
NOVOLAZAREVSKAYA	D02	-70.77	11.82	840
	E01	-70.80	11.80	880
NURMIJARVI	B12	60.51	24.65	444
NY-ALESUND	B08	79.00	12.00	718
	B08	79.00	12.00	711
	D01	78.92	11.93	445
ODESSA	D01	46.78	30.88	829
OKINAWA	B01	26.32	127.78	446
ONDREJOV	A08	49.92	14.98	800
	B08	49.92	14.98	803
	B14	49.92	14.98	804
	C01	49.92	14.98	802
	C03	49.92	14.98	801
	C04	49.92	14.98	805
OOTY	A14	11.38	76.67	448
OTTAWA	B01	76.10	45.15	449
	D01	45.40	284.45	450
	D02	45.20	284.50	451
OUAGADOUGOU (HAUTE VOLTA)	B01	12.37	358.47	452
OULU	D02	65.08	25.87	453
OVEJUVO	B01	-16.00	291.00	454
PALEHUA	A01	21.38	201.93	455
	A02	21.38	201.93	1114
	A04	21.38	201.93	1115
	A06	21.38	201.93	1116
	A08	21.38	201.93	1117
	C01	21.38	201.93	1118
	C03	21.38	201.93	1119
	C06	21.38	201.93	1120

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
PANSKA VES	B09	50.53	14.57	822
PAPEETE (PAMATAI)	D01	-17.55	188.23	456
PARAMARIBO	B01	5.82	304.78	457
	D01	5.81	304.79	458
PARATUNKA	E03	52.58	158.14	788
PENDELI	D01	38.05	23.86	35
PENN STATE U	A08	40.82	282.13	774
	C03	40.82	282.13	775
PENTELI	A01	38.05	23.86	900
	A02	38.05	23.86	901
	A04	38.05	23.86	902
	A05	38.05	23.86	904
	A05	38.05	23.86	903
	A08	38.05	23.86	905
	B06	38.05	23.86	906
	C01	38.05	23.86	907
	C03	38.05	23.86	908
	C08	38.05	23.86	909
PERTH	G01	-31.56	115.50	459
PIARCO	B13	10.60	298.65	1041
	B14	10.60	298.65	1043
	C06	10.60	298.65	1042
PIC DU MIDI	A07	42.94	.01	460
	F01	42.93	.25	461
PING-CHENG	B14	24.95	121.23	462
POITIERS	B01	46.57	.35	464
	B13	46.60	.30	465
POKER FLAT	B08	65.13	212.52	466
	B13	65.13	212.55	467
	D01	65.13	212.52	468
	D02	65.13	212.54	469
	E01	64.80	212.37	470
PORT ALFRED	D01	-46.43	51.87	127
	G01	-46.43	51.87	128
PORT AUX FRANCAIS	D01	-49.35	70.21	305
	E01	-49.35	70.22	307
	E02	-49.35	70.22	967
	E03	-49.35	70.22	968
	G01	-49.35	70.22	969
PORT MORESBY	B01	-9.41	147.15	471
	D01	-9.42	147.15	472
POTCHEFSTROOM	F01	-26.66	27.08	473
POTSDAM	A01	52.38	13.07	1136
	A02	52.38	13.07	1137
	A03	52.38	13.07	474
	A04	52.38	13.07	1138
	A06	52.38	13.07	1139
	C02	52.38	13.07	1140
PREDIGTSTUHL	F01	47.70	12.88	475
PRESTON	A02	53.81	357.41	476
	C06	53.77	357.30	477
PRUHONICE	B01	50.00	14.60	821
RAMEY	A01	18.50	292.80	478
	A04	18.50	292.80	1121

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
RAMEY (Cont.)	A06	18.52	292.90	1123
	B06	18.50	292.80	479
	B09	18.52	292.90	1124
	C01	18.50	292.80	1122
	C06	18.50	292.80	481
	C07	18.52	292.90	1125
RANKIN INLET	D01	62.63	268.08	484
RAROTONGA	B01	-21.30	200.10	485
	B11	-21.20	200.20	810
RESOLUTE BAY	B01	74.70	265.10	486
	D01	74.60	265.10	487
REWA	F01	24.32	81.17	488
RIO DE JANEIRO	B13	-22.87	316.87	1029
	B14	-22.87	316.87	1031
	C06	-22.87	316.87	1030
ROBURENT	B13	44.30	7.88	749
	D01	44.30	7.88	490
	D02	44.30	7.88	750
ROMA	F01	41.90	12.52	492
ROME	A01	41.90	12.50	741
	A03	41.90	12.50	745
	A04	41.90	12.50	744
	A05	41.90	12.50	742
	C01	41.90	12.50	743
	C03	41.90	12.50	746
RUAMPARA - BUNIA	D01	1.53	30.02	77
SABHAWALA	D01	30.37	77.80	493
SACHS HARBOR	B08	72.00	235.00	494
	E01	72.00	235.00	496
SACRAMENTO PEAK	A01	32.78	254.68	500
	A03	32.78	254.68	501
	A04	32.78	254.68	1126
	A05	32.78	254.68	1127
	A06	32.78	254.68	1128
	A07	32.78	254.68	506
	A07	32.78	254.68	499
	C01	32.78	254.68	502
	C01	32.78	254.68	498
	A01	32.78	254.68	497
SAGAMORE HILL	A08	42.63	289.18	1159
	A16	42.63	289.18	508
	B06	42.63	289.18	509
	B11	42.63	289.18	1158
	C03	42.63	289.18	1160
	C04	42.63	289.18	522
	C06	42.63	289.18	511
SAINT SANTIN	B03	44.63	2.22	525
SAKUSHIMA	B13	34.73	137.05	526
SAN CARLO CANAVESE	B01	45.25	7.63	616
SAN JUAN	D01	18.12	293.85	538
	D01	18.12	293.85	539
SANAE	B01	-70.31	357.65	528
	B04	-70.31	357.65	1044
	B08	-70.31	357.64	527

STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST	ITEM
SANAE (Cont.)	B13	-70.31	357.64	529
	C13	-70.31	357.64	1047
	C13	-70.31	357.64	1153
	D01	-70.32	357.66	530
	D02	-70.31	357.64	1045
	E01	-70.30	357.65	781
	E03	-70.31	357.64	1046
	F01	-70.31	357.64	531
	G01	-70.30	357.65	782
SAO JOSE DOS CAMPOS	B06	-23.21	314.14	534
SAO PAULO	B08	-23.50	313.50	758
	B13	-23.50	313.50	759
	C06	-23.17	313.43	541
SARDINIA	B13	39.18	9.16	1017
	B14	39.18	9.16	1019
	C06	39.18	9.16	1018
SASKATOON	E01	52.21	252.81	542
SCOTT BASE	B01	-77.81	166.76	543
	D01	-77.81	166.76	544
	E04	-77.75	167.50	548
SEOUL	B01	37.23	126.57	549
	D01	37.23	126.57	550
	F01	37.32	126.56	551
SHEEP CREEK	B01	64.93	212.00	123
SHILLONG	D01	25.57	91.88	552
SIDMOUTH	D02	50.67	356.75	553
SIPLE	D01	-76.00	276.00	554
	D02	-76.00	276.00	555
	D02	-76.00	276.00	1048
	E01	-76.00	276.00	556
SITKA	D01	57.06	224.67	557
SKALNATE PLESO	A01	49.19	20.25	558
	A02	49.19	20.25	1049
	A04	49.19	20.25	1050
	C01	49.19	20.25	1051
SLOUGH	A08	51.48	359.43	560
	B01	51.48	359.43	561
	C03	51.49	359.44	559
SOCORRO	F03	34.04	253.07	563
SODANKYLA	D02	67.32	26.63	564
SOGRA	B13	62.80	46.25	791
SONDRE STROMFJORD	B08	67.00	310.00	719
SOUTH GEORGIA	B01	-54.27	323.50	566
	D01	-54.28	323.52	567
	D02	-54.28	323.52	568
SOUTH POLE	B08	-90.00	0.	569
	E01	-90.00	0.	570
SOUTH UIST	B01	57.37	352.67	571
	D01	57.36	352.61	572
ST. CLOUD	C06	45.57	265.81	574
ST. JOHNS	B01	47.60	307.30	575
	D01	47.60	307.32	576
ST. KILDA	B04	-34.73	138.54	524
STANFORD	A03	37.41	237.83	573

STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST	ITEM
STONYHURST	D01	53.84	357.53	577
	D02	53.84	357.53	578
SUGADAIRA	A14	36.51	138.35	778
	B13	36.51	138.35	580
SULPHUR MOUNTAIN	F01	51.20	244.39	789
SUTHERLAND	A01	-33.93	18.48	565
	G01	-32.38	20.81	581
SVERDLOVSK	D01	56.82	60.60	866
SYDNEY	A03	-33.87	150.77	582
	A08	-33.87	150.77	583
SYOWA	B01	-69.00	39.35	1141
	B06	-69.00	39.60	1142
	B08	-69.00	39.35	586
	B13	-69.00	39.58	587
	E04	-69.00	39.35	588
TAHITI	B01	-17.73	210.68	589
	B01	-17.70	210.70	590
TAIPEI	B06	25.20	121.50	591
	B11	25.20	121.50	1053
TAKEYAMA	F03	35.22	139.62	592
TANANARIVE	B13	-18.92	47.55	1038
	B14	-18.92	47.55	1040
	C06	-18.92	47.55	1039
	C06	-18.55	47.55	593
TASHKENT	F01	41.33	69.61	594
TEHRAN	A01	35.70	51.47	1108
	A02	35.70	51.47	1109
	A04	35.70	51.47	1110
	A06	35.70	51.47	1111
	B01	35.70	51.40	755
	B06	35.70	51.40	757
	C01	35.70	51.47	1112
	C06	35.70	51.47	1113
	D01	35.70	51.40	756
TEL AVIV	C01	32.10	34.50	597
TENERIFE	A02	28.48	343.72	598
	A14	28.48	343.72	1105
	D01	28.48	343.72	599
	D02	28.48	343.72	1054
	G01	28.48	343.72	1106
TERRE ADELIE	B01	-66.66	140.02	600
	B02	-66.66	140.02	601
	B08	-66.66	140.02	602
	B09	-66.40	140.01	792
	D01	-66.67	140.00	603
	E01	-66.67	140.00	604
	F01	-66.67	140.02	605
THOMPSON	D01	55.72	262.12	606
THORSHAVN	B08	62.03	353.24	717
THULE	B01	77.50	290.80	728
	B06	76.40	291.30	607
	B08	77.50	290.80	726
	D02	76.60	291.20	609
THULE/CAMP TUTO	D01	76.55	291.17	608

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
TIHANY	B13	46.90	17.89	610
	B14	46.90	17.89	1058
	D01	46.90	17.89	1059
TIXIE BAY	B01	71.60	129.00	842
	D01	71.60	128.90	871
	F01	71.60	129.00	843
TOKYO	A04	35.67	139.54	611
	C01	35.67	139.54	1060
	F01	35.75	139.72	612
TOKYO-ITABASHI	F02	35.75	139.72	613
TOLEDO	D01	39.88	355.95	614
	D02	39.88	355.95	1061
TOMSK	B01	56.00	84.00	825
TOOLANGI	D01	-37.53	145.47	615
TORINO	B08	45.05	7.75	751
	B13	45.05	7.75	752
	C06	45.05	7.67	617
TORUN	A16	53.10	18.55	1089
	C03	53.10	18.55	1090
TOWNSVILLE	B01	-19.30	146.73	628
	B04	-19.25	146.75	629
TOYOKAWA	A08	34.83	137.37	630
	A09	34.83	137.37	631
	A09	34.83	137.37	1143
	A10	34.83	137.37	1144
	A10	34.83	137.37	632
	A14	34.83	137.37	780
	B13	34.82	137.39	633
TRELEW	B01	-43.20	294.70	815
	B07	-43.20	294.70	816
	D01	-43.25	294.68	754
TREMSDORF	A08	52.28	13.13	634
	C03	52.28	13.13	1064
TRIESTE	A08	45.64	13.88	635
	A10	45.64	13.88	636
	C03	45.64	13.88	1065
	C03	45.64	13.88	1066
TRIVANDRUM	D01	8.48	76.95	637
TROMSO	B01	69.70	19.00	705
	B08	69.70	19.00	706
	B13	69.70	19.00	707
	B15	69.70	19.00	708
	D01	69.66	18.94	638
TSIMLJANSK	G01	47.70	42.00	1161
TSUMEB	D01	-19.20	17.58	639
TUCSON	D01	32.25	249.17	641
	D01	32.25	249.17	640
UCCLE	A01	50.80	4.35	644
	A02	50.80	4.35	642
	C01	50.80	4.35	643
UDAIPUR	B07	24.60	73.70	826
UECHT	A04	46.85	7.27	645
	C01	46.85	7.27	1067
	C03	46.85	7.27	646

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
UECHT (Cont.)	C03	46.85	7.27	647
UJJAIN	D01	23.02	75.78	648
UPICE	A08	50.30	16.01	795
	B08	50.30	16.01	798
	B14	50.30	16.01	799
	C01	50.30	16.01	797
	C03	50.30	16.01	796
UPPSALA	B01	59.80	17.60	1092
	B06	59.80	17.60	649
	B08	59.80	17.60	650
	B12	59.80	17.60	651
	D01	59.80	17.60	1091
URBANA	B15	40.17	271.84	652
USHUAIA	B01	-54.80	291.70	811
	B07	-54.80	291.70	812
	B08	-54.80	291.70	813
	B14	-54.80	291.70	814
USSURISK	D01	43.68	132.17	869
UTRECHT	F01	52.06	5.07	653
	F03	52.08	5.13	700
VALENTIA	D01	51.93	349.75	654
	D02	51.93	349.75	655
VALLEY COTTAGE	B14	41.07	286.45	657
	C06	41.07	286.45	1068
VANDENBERG AFB	B01	34.73	239.43	463
	B01	34.72	239.43	658
VANIMO	B01	-2.70	141.30	659
VELETA	G01	37.10	356.58	88
VICTORIA	D01	48.52	236.58	660
	G01	48.46	236.70	1093
VICTORIAS	A16	10.90	123.07	661
VOSTOK	B08	-78.45	106.87	662
	D02	-78.45	106.87	663
	E01	-78.40	106.90	881
VSETIN	B14	49.21	17.59	806
WAKKANAI	B01	45.39	141.69	664
WALLOPS ISLAND	B01	37.94	284.53	665
	B08	37.94	284.53	1069
	B09	37.94	284.53	1070
	D01	37.94	284.53	1071
WARNKENHAGEN	D01	54.00	11.07	1154
	D02	54.00	11.07	1155
WELLINGTON	B11	-41.23	174.92	809
	B13	-41.23	174.92	763
WESTON	D01	42.43	288.68	667
WINGST	D01	53.74	9.07	669
	D01	53.74	9.07	668
	D02	53.74	9.07	1072
WINKFIELD	B02	51.45	359.30	670
WINNIPEG	D01	49.63	262.87	672
WITTEVEEN	D01	52.81	6.67	673
	D01	52.81	6.67	674
	D02	52.82	6.67	675
WOOMERA	D02	-31.10	136.78	676

STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST	ITEM
YAKUTSK	B01	62.00	129.70	841
	B12	62.00	129.70	677
	D01	62.02	129.72	867
	F01	62.02	129.72	678
	F02	62.02	129.72	679
	F03	62.02	129.72	681
YAMAGAWA	B01	31.20	130.62	684
YELLOWKNIFE	D01	62.48	245.53	685
YORK	D01	53.97	358.92	761
	D02	53.97	358.92	686
	D02	53.95	358.95	687
YUZHNO-SAKHALINSK	D01	46.93	142.70	870
ZARIA	D01	11.15	7.65	688
ZVENIGOROD	G01	55.70	36.80	1162

3. LIST OF EQUIVALENT STATION NAMES

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MONSEE STATION NAME	EQUIVALENT NAME
AKITA	AK, 539
ALMA-ATA	KAZAKH STATE U
ANDOYA	OKSEBASEN
ARGENTINE ISLANDS	PORT LOCKROY
ARRIVAL HEIGHTS	SCOTT BASE
ATHENS	OL-C, 2 WEATHER WING
ATIBAIA, ITAPETINGA	ITAPETINGA
	SAO PAULO
BAGNERES	BAGNERES-DE-BIGORRE
BAGUIO	MANILA
	MIRADOR
BATTELLE	RICHLAND
BEAR ISLAND	BJORNOYA
BEKESCSABA	BUDAPEST
BELGRANO	GENERAL BELGRANO
BINZA	KINSHASA
BOULDER	IONBC
	SOLTERWARN
	TELCOM BOULDER
BUENOS AIRES	SAN MIGUEL
CACHOEIRA PAULISTA	SAN JOSE
	SAO JOSE DOS CAMPOS
CASEY	REPSTAT
	WILKES
CATARMAN	UEP AGROMET
CHACALTAYA	LA PAZ
CHATANIKA	DNA617 RADAR
CHELYUSKIN	CAPE CHELYUSKIN
CHRISTCHURCH	GODLEY HEAD
	LINCOLN
CHUNG-LI	TAIPEI
COLLEGE	CHATANIKA
	ESTER DOME
	FAIRBANKS
	POKER FLAT
COLOMBO	SRI LANKA
CONCEPCION	IONCP
CULGOORA	CSIRO SOLAR OBSERVATORY
	I.P.S. SOLAR OBSERVATORY
DAKAR	CAMBERENE
DAVAO	MANILA
DE BILT	ROYAL NETHERLANDS MET INST
DENVER	UNIVERSITY OF DENVER
DIXON	DIXON ISLAND
DJIBOUTI	ARTA
DUMONT DURVILLE	TERRE ADELIE
DUNEDIN	SWAMPY SUMMIT
DURNTEN	ZURICH
DWINGELOO	NETH. FOUND.RADIO ASTRONOMY
EARLYBURN	EDDLESTON
EBRO	TORTOSA
FORT CHURCHILL	CHURCHILL
GENERAL BELGRANO	BELGRANO
	GRAL BELGRANO
GENOVA-MT. CAPELLINO	B-236
GOOSE BAY	MELVILLE AFB

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MONSEE STATION NAME	EQUIVALENT NAME
HAMBURG	PLANETARIUM HAMBURG
HARVARD	FORT DAVIS
HEISS ISLAND	HEISE
HURBANOVO	SLOVAK CENTER/AMATEUR ASTRONOMY
IRKUTSK	PATRONY
	ZUI
IZMIRAN	KRASNAYA PAKHRA
	MOSCOW
KADILLI	ISTANBUL
KARAVIA	ELIZABETHVILLE
	LUBUMBASHI
KASUGAI	CHUBU
KENORA	WINNIPEG
KERGUELEN	PORT AUX FRANCAIS
KINGSTON	UNIV OF RHODE ISLAND - ELF
KOKUBUNJI/TOKYO	TOKYO
	TO 535
LA JOLLA	UCSD
LA POSTA	NAVY ELECTRONIC LAB CEN (NELC)
	NELC
	OL C, 12 WEATHER SQUADRON
LATROBE	SID-SVC-A-19
LEIRVOGUR	REYKJAVIK
LITTLETON	A-21 AAVSO
LOMNICKY STIT	SKALNATE PLESO
LOS BANOS	UPCA LOS BANOS
LUANDA	MULEMBA SPACE CENTER
MAKAPUU PT	HONOLULU
MANILA	PAGASA
	QUEZON CITY
MARINA	SAN FERNANDO
MAUNA LOA	HAO/NCAR MAUNA LOA STATION
MEXICO	C.U. (CIUDAD UNIVERSITARIA)
	MEXICO CITY
MOSCOW	DOLGOPRUDNY, MOSCOW REG.
	KRASNAYA PAKHRA
MULEMBA	LUANDA
MURMANSK	OLENJA, MURMANSK REGION
NIEMEGK	POTSDAM
	SEDDIN
OKINAWA	OK, 426
OOTY	OOTACAMUND
OTTAWA	ASHTON
PALEHUA	OL-D, 1 WEATHER WING
PAPEETE (PAMATAI)	TAHITI
PENDELI	ATHENS
PENTELI	ATHENS
PIARCO	TRINIDAD
PORT ALFRED	CROZET
PORT AUX FRANCAIS	KERGUELEN
POTSDAM	EINSTEINTURM
PRESTON	JEREMIAH HORROCKS OBS
	WILFRED HALL OBS
RAMEY	OL D 12 WEATHER SQUADRON
ROBURENT	B-280
ROMA	ROME
	SVIRCO

MONSEE STATION NAME	EQUIVALENT NAME
RUAMPARA - BUNIA	BUNIA
SACRAMENTO PEAK	SAC PEAK
SAN CARLO CANAVESE	TORINO
SAN JUAN	PUERTO RICO
SANAE	NORWAY STATION
SAO JOSE DOS CAMPOS	INPE/SAO JOSE DOS CAMPOS
	SAN JOSE
SASKATOON	PARK OBSERVATION SITE
SEOUL	SOGANG
SHEEP CREEK	COLLEGE
SIDMOUTH	NORMAN LOCKYER OBSERVATORY
SOUTH GEORGIA	KING EDWARD POINT
SOUTH UIST	WEST GEIRINISH, SCOTLAND
SUTHERLAND	ROYAL OBS. CAPE OF GOOD HOPE
	SO. AFRICAN ASTRONOMICAL OBS. (SAAO)
SYDNEY	FLEURS
SYOWA	SW, 16R
TAHITI	TARAVAO
TEHRAN	OL-D, 2 WEATHER WING
TERRE ADELIE	DUMONT DURVILLE
THULE	GEOPOLE
TOKYO	ITABASHI
	TOKYO-ITABASHI
TOKYO-ITABASHI	ITABASHI-TOKYO
TORINO	IEN - TORINO
TORUN	NICOLAUS COPERNICUS UNIV.
	PIWNICE ASTRONOMICAL OBS.
TRIESTE	BASOVIZZA
VALLEY COTTAGE	A1 AAVSO
VANDENBERG AFB	POINT ARGUELLO
VELETA	CARTUJA
WAKKANAI	KK, 545
WINNIPEG	GLENLEA
YAMAGAWA	YG, 431

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4. LISTING BY SUBDISCIPLINES

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ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
A01	**SUNSPOT POSITIONS, AREAS, AND CLASSIFICATIONS**			
257	HERSTMONCEUX	A01	50.87	.34
618	EBRO	A01	40.32	.49
644	UCCLE	A01	50.80	4.35
235	HAMBURG	A01	53.64	9.96
741	ROME	A01	41.90	12.50
1136	POTSDAM	A01	52.38	13.07
993	MULEMBA	A01	-8.79	13.31
297	KANZELHOEHE	A01	46.68	13.91
99	CATANIA	A01	37.50	15.08
565	SUTHERLAND	A01	-33.93	18.48
558	SKALNATE PLESO	A01	49.19	20.25
206	ATHENS	A01	37.85	23.72
900	PENTELI	A01	38.05	23.86
72	BUCHAREST	A01	44.41	26.05
293	KANDILLI	A01	41.06	29.06
320	KISLOVODSK	A01	44.70	42.50
1108	TEHRAN	A01	35.70	51.47
44	BAGUIO	A01	16.41	120.63
383	MANILA	A01	14.64	121.08
388	MANILA	A01	14.52	121.00
382	MANILA	A01	14.65	121.07
365	LUNPING	A01	25.00	121.17
455	PALEHUA	A01	21.38	201.93
497	SACRAMENTO PEAK	A01	32.78	254.68
500	SACRAMENTO PEAK	A01	32.78	254.68
64	BOULDER	A01	39.98	254.72
1073	MCMATH-HULBERT	A01	42.66	276.74
478	RAMEY	A01	18.50	292.80
74	BUENOS AIRES	A01	-34.55	301.27
A02	**SUNSPOT NUMBERS**			
619	EBRO	A02	40.82	.49
642	UCCLE	A02	50.80	4.35
944	HAMBURG	A02	53.64	9.96
1137	POTSDAM	A02	52.38	13.07
362	LUANDA	A02	-8.79	13.31
961	KANZELHOEHE	A02	46.68	13.91
100	CATANIA	A02	37.50	15.08
954	HURBANOVO	A02	47.87	15.21
1049	SKALNATE PLESO	A02	49.19	20.25
1145	ATHENS	A02	37.85	23.72
901	PENTELI	A02	38.05	23.86
931	BUCHAREST	A02	44.41	26.05
957	KANDILLI	A02	41.06	29.06
1109	TEHRAN	A02	35.70	51.47
995	MANILA	A02	14.65	121.07
994	LUNPING	A02	25.00	121.17
1114	PALEHUA	A02	21.38	201.93
920	BOULDER	A02	39.98	254.72
75	BUENOS AIRES	A02	-34.55	301.27
598	TENERIFE	A02	28.48	343.72
476	PRESTON	A02	53.81	357.41

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST
A03 SOLAR MAGNETIC FIELDS				
397	MEUDON	A03	48.80	2.25
745	ROME	A03	41.90	12.50
474	POTSDAM	A03	52.38	13.07
972	KISLOVODSK	A03	44.70	42.50
860	IRKUTSK	A03	52.47	104.03
582	SYDNEY	A03	-33.87	150.77
573	STANFORD	A03	37.41	237.83
322	KITT PEAK	A03	31.96	248.40
501	SACRAMENTO PEAK	A03	32.78	254.68
A04 H-ALPHA OBSERVATIONS (OTHER THAN FLARES)				
620	EBRO	A04	40.82	.49
399	MEUDON	A04	48.80	2.23
398	MEUDON	A04	48.80	2.23
645	UECHT	A04	46.85	7.27
1079	ARCETRI	A04	43.75	11.25
744	ROME	A04	41.90	12.50
1138	POTSDAM	A04	52.38	13.07
298	KANZELHOEHE	A04	46.68	13.91
768	CAPRI F	A04	40.55	14.22
101	CATANIA	A04	37.50	15.08
953	HURBANOVO	A04	47.87	15.21
1050	SKALNATE PLESO	A04	49.19	20.25
1146	ATHENS	A04	37.85	23.72
902	PENTELI	A04	38.05	23.86
932	BUCHAREST	A04	44.41	26.05
958	KANDILLI	A04	41.06	29.06
973	KISLOVODSK	A04	44.70	42.50
1110	TEHRAN	A04	35.70	51.47
385	MANILA	A04	14.64	121.08
384	MANILA	A04	14.64	121.08
611	TOKYO	A04	35.67	139.54
1115	PALEHUA	A04	21.38	201.93
223	HALEAKALA	A04	20.71	203.74
1126	SACRAMENTO PEAK	A04	32.78	254.68
927	BOULDER	A04	39.98	254.72
1074	MCMATH-HULBERT	A04	42.66	276.74
1121	RAMEY	A04	18.50	292.80
76	BUENOS AIRES	A04	-34.55	301.27
A05 CALCIUM PLAGES				
1004	MEUDON	A05	48.80	2.23
742	ROME	A05	41.90	12.50
96	CATANIA	A05	37.50	15.08
904	PENTELI	A05	38.05	23.86
903	PENTELI	A05	38.05	23.86
959	KANDILLI	A05	41.06	29.06
974	KISLOVODSK	A05	44.70	42.50
996	MANILA	A05	14.64	121.08
1127	SACRAMENTO PEAK	A05	32.78	254.68
1075	MCMATH-HULBERT	A05	42.66	276.74

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
A06 SOLAR MAPS, PROMINENCES, FILAMENTS				
1005	MEUDON	A06	48.80	2.23
1139	POTSDAM	A06	52.38	13.07
770	CAPRI F	A06	40.55	14.22
935	CATANIA	A06	37.50	15.08
955	HURBANOVO	A06	47.87	15.21
353	LOMNICKY STIT	A06	49.18	20.22
1147	ATHENS	A06	37.85	23.72
975	KISLOVODSK	A06	44.70	42.50
1111	TEHRAN	A06	35.70	51.47
997	MANILA	A06	14.64	121.08
1003	MAUNA LOA	A06	19.53	155.58
1116	PALEHUA	A06	21.38	201.93
224	HALEAKALA	A06	20.71	203.74
979	KITT PEAK	A06	31.96	248.40
1128	SACRAMENTO PEAK	A06	32.78	254.68
928	BOULDER	A06	39.98	254.72
1123	RAMEY	A06	18.52	292.90
A07 OPTICAL OBSERVATIONS OF THE CORONA				
460	PIC DU MIDI	A07	42.94	.01
992	LOMNICKY STIT	A07	49.18	20.22
976	KISLOVODSK	A07	44.70	42.50
414	MT NORIKURA	A07	36.11	137.55
394	MAUNA LOA	A07	19.53	155.58
225	HALEAKALA	A07	20.71	203.74
506	SACRAMENTO PEAK	A07	32.78	254.68
499	SACRAMENTO PEAK	A07	32.78	254.68
A08 TOTAL RADIO FLUX MEASUREMENTS				
1085	DWINGELOO	A08	52.81	6.40
1083	ARCETRI	A08	43.75	11.25
634	TREMSDORF	A08	52.28	13.13
635	TRIESTE	A08	45.64	13.88
800	ONDREJOV	A08	49.92	14.98
795	UPICE	A08	50.30	16.01
1148	ATHENS	A08	37.85	23.72
905	PENTELI	A08	38.05	23.86
977	KISLOVODSK	A08	44.70	42.50
859	IRKUTSK	A08	52.47	104.03
389	MANILA	A08	14.64	121.08
301	KASUGAI	A08	35.27	137.01
630	TOYOKAWA	A08	34.83	137.37
258	HIRAISO	A08	36.37	140.63
583	SYDNEY	A08	-33.87	150.77
1117	PALEHUA	A08	21.38	201.93
985	LA POSTA	A08	32.40	243.50
63	BOULDER	A08	40.10	254.75
774	PENN STATE U	A08	40.82	282.13
945	HAMILTON	A08	42.25	289.00
1159	SAGAMORE HILL	A08	42.63	289.18
329	LA PAZ	A08	-16.30	291.91
828	BUENOS AIRES	A08	-34.55	301.27
560	SLOUGH	A08	51.48	359.43

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
A09 RADIO AND RADAR MAPS OF SOLAR DISK				
432	NANCAY	A09	44.40	2.20
631	TOYOKAWA	A09	34.83	137.37
1143	TOYOKAWA	A09	34.83	137.37
331	LA POSTA	A09	32.40	243.50
A10 RADIO EAST-WEST SCANS OF SOLAR DISK				
431	NANCAY	A10	47.38	.15
430	NANCAY	A10	47.38	.15
429	NANCAY	A10	47.38	.15
636	TRIESTE	A10	45.64	13.88
632	TOYOKAWA	A10	34.83	137.37
1144	TOYOKAWA	A10	34.83	137.37
440	NOBEYAMA	A10	35.93	138.48
439	NOBEYAMA	A10	35.93	138.48
A11 SOLAR X-RAY AND UV BACKGROUND LEVELS				
921	BOULDER	A11	39.98	254.72
A12 ENERGETIC SOLAR PROTONS AND SOLAR ELECTRONS				
922	BOULDER	A12	39.98	254.72
A14 COMET TAILS, INTERPLANETARY SCINTILLATIONS, ZODIACAL LIGHT				
448	OOTY	A14	11.38	76.67
780	TOYOKAWA	A14	34.83	137.37
778	SUGADAIRA	A14	36.51	138.35
779	FUJIGANE	A14	35.41	138.61
326	LA JOLLA	A14	32.51	242.58
116	CLARK LAKE	A14	33.34	243.72
1105	TENERIFE	A14	28.48	343.72
A16 TOTAL SOLAR RADIATION.				
621	EBRO	A16	40.82	.49
1089	TORUN	A16	53.10	18.55
43	BAGUIO	A16	16.42	120.60
386	MANILA	A16	14.65	121.06
387	MANILA	A16	14.64	121.08
359	LOS BANOS	A16	14.22	121.25
661	VICTORIAS	A16	10.90	123.07
98	CATARMAN	A16	12.52	124.67
361	LOWELL	A16	35.20	248.34
508	SAGAMORE HILL	A16	42.63	289.18

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
B01 IONOSPHERE VERTICAL SOUNDINGS				
51	BELGRANO	B01	-77.97	321.20
543	SCOTT BASE	B01	-77.81	166.76
227	HALLEY BAY	B01	-75.52	333.37
528	SANAE	B01	-70.31	357.65
1141	SYOWA	B01	-69.00	39.35
689	MAWSON	B01	-67.60	62.88
600	TERRE ADELIE	B01	-66.66	140.02
89	CASEY	B01	-66.29	110.53
27	ARGENTINE ISLANDS	B01	-65.25	295.73
811	USHUAIA	B01	-54.80	291.70
566	SOUTH GEORGIA	B01	-54.27	323.50
79	CAMPBELL ISLAND	B01	-52.60	169.10
302	KERGUELEN	B01	-49.35	70.24
391	MARION ISLAND	B01	-46.85	37.87
112	CHRISTCHURCH	B01	-43.55	172.75
815	TRELEW	B01	-43.20	294.70
262	HOBART	B01	-42.91	147.31
56	BEVERIDGE	B01	-37.47	144.93
38	AUCKLAND	B01	-37.00	175.00
126	CONCEPCION	B01	-36.78	286.88
84	CANBERRA	B01	-35.31	149.00
818	BUENOS AIRES	B01	-34.50	301.50
244	HERMANUS	B01	-34.42	19.23
212	GRAHAMSTOWN	B01	-33.27	26.53
419	MUNDARING	B01	-31.98	116.21
442	NORFOLK ISLAND	B01	-29.03	167.97
70	BRISBANE	B01	-27.53	152.91
287	JOHANNESBURG	B01	-26.10	28.10
533	CACHOEIRA PAULISTA	B01	-22.70	314.98
485	RAROTONGA	B01	-21.30	200.10
628	TOWNSVILLE	B01	-19.30	146.73
589	TAHITI	B01	-17.73	210.68
590	TAHITI	B01	-17.70	210.70
454	OVEJUVO	B01	-16.00	291.00
471	PORT MORESBY	B01	-9.41	147.15
172	FORTALEZA	B01	-3.75	321.05
659	VANIMO	B01	-2.70	141.30
427	NAIROBI	B01	-1.28	36.83
457	PARAMARIBO	B01	5.82	304.78
275	IBADAN	B01	7.40	3.90
765	KODAIKANAL	B01	10.20	77.50
148	DJIBOUTI	B01	11.51	42.83
452	OUAGADOUGOU (HAUTE V	B01	12.37	358.47
131	DAKAR	B01	14.76	342.58
401	MEXICO	B01	19.43	260.30
393	MAUI	B01	20.83	203.53
264	HONG KONG	B01	22.33	114.20
730	AHMEDABAD	B01	23.00	72.60
113	CHUNG-LI	B01	24.95	121.23
446	OKINAWA	B01	26.32	127.78
684	YAMAGAWA	B01	31.20	130.62
986	LA POSTA	B01	32.40	243.50
87	CAPE ZEVGARI	B01	34.58	32.95
658	VANDENBURG AFB	B01	34.72	239.43
463	VANDENBERG AFB	B01	34.73	239.43
755	TEHRAN	B01	35.70	51.40

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
324	KOKUBUNJI/TOKYO	B01	35.71	139.49
47	BALERMA	B01	36.75	357.17
160	EL ARENOSILLO	B01	37.10	353.25
549	SEOUL	B01	37.23	126.57
847	ASHKHABAD	B01	37.93	58.37
665	WALLOPS ISLAND	B01	37.94	284.53
5	AKITA	B01	39.73	140.14
66	BOULDER	B01	40.03	254.70
622	EBRO	B01	40.82	.49
403	MILLSTONE HILL	B01	42.61	288.51
831	ALMA ATA	B01	43.25	76.92
491	GENOVA-MT. CAPELLINO	B01	44.60	9.00
616	SAN CARLO CANAVESE	B01	45.25	7.63
664	WAKKANAI	B01	45.39	141.69
833	NOVOKAZALINSK	B01	45.76	62.12
464	POITIERS	B01	46.57	.35
73	BEKESCSABA	B01	46.67	21.17
214	GRAZ	B01	47.10	15.50
187	GARCHY	B01	47.28	3.07
575	ST. JOHNS	B01	47.60	307.30
327	LANNION	B01	48.75	356.55
671	KENORA	B01	49.79	265.51
835	KARAGANDA	B01	49.81	73.08
821	PRUHONICE	B01	50.00	14.60
152	DOURBES	B01	50.10	4.60
850	KIEV	B01	50.72	30.30
561	SLOUGH	B01	51.48	359.43
348	LINDAU/HARZ B 103	B01	51.65	10.12
141	DE BILT	B01	52.10	5.18
861	IRKUTSK	B01	52.47	104.03
208	GOOSE BAY	B01	53.32	299.54
288	JULIUSRUH/RUGEN	B01	54.63	13.38
854	KALINGRAD	B01	54.70	20.62
852	MOSCOW	B01	55.47	37.32
825	TOMSK	B01	56.00	84.00
571	SOUTH UIST	B01	57.37	352.67
114	CHURCHILL	B01	58.70	265.80
1092	UPPSALA	B01	59.80	17.60
727	NARSSARSSUAQ	B01	61.20	314.60
841	YAKUTSK	B01	62.00	129.70
368	LYCKSELE	B01	64.62	18.67
123	SHEEP CREEK	B01	64.93	212.00
312	KIRUNA	B01	67.80	20.40
863	NORILSK	B01	69.00	88.00
729	GODHAVN	B01	69.30	306.50
705	TROMSO	B01	69.70	19.00
842	TIXIE BAY	B01	71.60	129.00
486	RESOLUTE BAY	B01	74.70	265.10
449	OTTAWA	B01	76.10	45.15
728	THULE	B01	77.50	290.80

B02 TOPSIDE-VERTICAL INCIDENCE SOUNDINGS

601	TERRE ADELIE	B02	-66.66	140.02
299	KASHIMA	B02	35.95	140.67
670	WINKFIELD	B02	51.45	359.30

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST
B03 INCOHERENT SCATTER SOUNDINGS				
286	JICAMARCA	B03	-11.95	283.13
29	ARECIBO	B03	18.35	293.25
404	MILLSTONE HILL	B03	42.62	288.51
525	SAINT SANTIN	B03	44.63	2.22
381	MALVERN	B03	52.13	357.67
104	CHATANIKA	B03	65.10	212.55
B04 OBLIQUE INCIDENCE SOUNDINGS				
1044	SANAE	B04	-70.31	357.65
524	ST. KILDA	B04	-34.73	138.54
939	GRAHAMSTOWN	B04	-33.27	26.53
629	TOWNSVILLE	B04	-19.25	146.75
987	LA POSTA	B04	32.40	243.50
971	KIRUNA	B04	67.80	20.40
B06 TOTAL ELECTRON CONTENT - SATELLITE BEACONS				
1142	SYOWA	B06	-69.00	39.60
283	INVERCARGILL	B06	-46.40	168.40
40	AUCKLAND	B06	-37.00	175.00
32	ARMIDALE	B06	-30.50	151.50
534	SAO JOSE DOS CAMPOS	B06	-23.21	314.14
276	IBADAN	B06	7.40	3.90
30	ARECIBO	B06	18.35	293.25
479	RAMEY	B06	18.50	292.80
265	HONG KONG	B06	22.33	114.20
591	TAIPEI	B06	25.20	121.50
222	HAIFA	B06	32.87	35.09
757	TEHRAN	B06	35.70	51.40
161	EL ARENOSILLO	B06	37.10	353.25
1149	ATHENS	B06	37.85	23.72
906	PENTELI	B06	38.05	23.86
623	EBRO	B06	40.82	.49
237	HAMILTON	B06	42.25	289.00
357	LONDON (ONTARIO)	B06	42.59	278.86
509	SAGAMORE HILL	B06	42.63	289.18
1081	ARCETRI	B06	43.75	11.25
215	GRAZ	B06	47.10	15.50
328	LANNION	B06	48.68	356.50
704	BRUXELLES	B06	50.50	4.20
360	LOUVAIN-LA-NEUVE	B06	50.75	4.57
54	BELSK	B06	51.84	20.79
209	GOOSE BAY	B06	55.33	299.50
649	UPPSALA	B06	59.80	17.60
607	THULE	B06	76.40	291.30
B07 IONOSPHERIC ABSORPTION-METHOD A1 (PULSE ECHO)				
812	USHUAIA	B07	-54.80	291.70
816	TRELEW	B07	-43.20	294.70
817	BUENOS AIRES	B07	-34.50	301.50
125	COLOMBO	B07	6.90	79.87
4	AHMEDABAD	B07	23.00	72.60
826	UDAIPUR	B07	24.60	73.70
259	HIRAISO	B07	36.37	140.63
846	ASHKHABAD	B07	37.93	58.37
747	GENOVA	B07	44.55	8.95
938	DOURBES	B07	50.10	4.60
142	DE BILT	B07	52.10	5.18
956	JULIUSRUH/RUGEN	B07	54.63	13.38

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
B08 IONOSPHERIC ABSORPTION-METHOD A2 (RIOMETER)				
569	SOUTH POLE	B08	-90.00	0.
662	VOSTOK	B08	-78.45	106.87
910	GENERAL BELGRANO	B08	-77.97	321.20
228	HALLEY BAY	B08	-75.52	333.37
527	SANAE	B08	-70.31	357.64
586	SYOWA	B08	-69.00	39.35
136	DAVIS	B08	-68.58	77.96
135	DAVIS	B08	-68.58	77.96
690	MAWSON	B08	-67.60	62.88
602	TERRE ADELIE	B08	-66.66	140.02
882	MIRNY	B08	-66.60	93.00
90	CASEY	B08	-66.29	110.53
813	USHUAIA	B08	-54.80	291.70
374	MACQUARIE ISLAND	B08	-54.50	158.95
303	KERGUELEN	B08	-49.35	70.27
772	BEVERIDGE	B08	-37.47	144.93
808	AUCKLAND	B08	-37.00	175.00
245	HERMANUS	B08	-34.42	19.22
758	SAO PAULO	B08	-23.50	313.50
150	DJIBOUTI	B08	11.52	42.83
734	AHMEDABAD	B08	23.01	72.60
260	HIRAISO	B08	36.37	140.63
1069	WALLOPS ISLAND	B08	37.94	284.53
1100	MCMATH-HULBERT	B08	42.66	276.74
751	TORINO	B08	45.05	7.75
803	ONDREJOV	B08	49.92	14.98
702	DOURBES	B08	50.10	4.60
798	UPICE	B08	50.30	16.01
703	BRUXELLES	B08	50.50	4.20
55	BELSK	B08	51.84	20.79
650	UPPSALA	B08	59.80	17.60
724	NARSSARSSUAQ	B08	61.20	314.60
717	THORSHAVN	B08	62.03	353.24
723	GODTHAB	B08	64.19	308.27
369	LYCKSELE	B08	64.62	18.67
203	COLLEGE	B08	64.87	212.18
106	CHATANIKA	B08	65.10	212.57
466	POKER FLAT	B08	65.13	212.52
721	ANGMAGSSALIK	B08	65.61	322.34
175	FORT YUKON	B08	66.56	214.78
719	SONDRE STROMFJORD	B08	67.00	310.00
313	KIRUNA	B08	67.84	20.42
278	INUVIK	B08	68.25	226.70
864	NORILSK	B08	69.00	88.00
18	ANDOYA	B08	69.29	16.02
725	GODHAVN	B08	69.30	306.17
706	TROMSO	B08	69.70	19.00
720	KAP TOBIN	B08	70.42	338.03
494	SACHS HARBOR	B08	72.00	235.00
709	BEAR ISLAND	B08	74.50	19.20
411	MOULD BAY	B08	76.20	240.60
722	DANMARKSHAVN	B08	76.77	341.37
726	THULE	B08	77.50	290.80
711	NY-ALESUND	B08	79.00	12.00
718	NY-ALESUND	B08	79.00	12.00

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
B09 IONOSPHERIC ABSORPTION-METHOD A3 (CW FIELDSTRENGTH)				
793	MAWSON	B09	-67.60	62.90
792	TERRE ADELIE	B09	-66.40	140.01
766	KODAIKANAL	B09	10.20	77.50
1124	RAMEY	B09	18.52	292.90
367	LUNPING	B09	25.00	121.17
988	LA POSTA	B09	32.40	243.50
261	HIRAISO	B09	36.37	140.63
1070	WALLOPS ISLAND	B09	37.94	284.53
6	AKITA	B09	39.73	140.14
624	EBRO	B09	40.82	.49
748	GENOVA	B09	44.55	8.95
822	PANSKA VES	B09	50.53	14.57
143	DE BILT	B09	52.10	5.18
364	LUECHOW	B09	53.00	11.20
325	KUHLUNGSBORN	B09	54.12	11.77
794	DOLGOSCHELIE	B09	66.03	43.24
B10 IONOSPHERIC DRIFTS				
845	ASHKHABAD	B10	37.93	58.37
188	GARCHY	B10	47.28	3.07
340	LEICESTER	B10	52.00	359.00
144	DE BILT	B10	52.10	5.18
862	IRKUTSK	B10	52.47	104.03
981	KUHLUNGSBORN	B10	54.12	11.77
B11 IONOSPHERIC SCINTILLATIONS FROM SATELLITE				
809	WELLINGTON	B11	-41.23	174.92
810	RAROTONGA	B11	-21.20	200.20
952	HONG KONG	B11	22.28	114.13
1053	TAIPEI	B11	25.20	121.50
941	HAIFA	B11	32.87	35.09
1158	SAGAMORE HILL	B11	42.63	289.18
1082	ARCETRI	B11	43.75	11.25
916	BELSK	B11	51.84	20.79
B12 IONOSPHERIC BACK- AND FORWARD-SCATTER				
351	LINDAU	B12	51.65	10.13
651	UPPSALA	B12	59.80	17.60
444	NURMIJARVI	B12	60.51	24.65
677	YAKUTSK	B12	62.00	129.70
204	COLLEGE	B12	64.86	212.15
176	FORT YUKON	B12	66.57	214.75
B13 WHISTLERS AND VLF EMISSIONS				
52	BELGRANO	B13	-77.97	321.20
229	HALLEY BAY	B13	-75.52	333.30
231	HALLEY BAY	B13	-75.52	333.37
230	HALLEY BAY	B13	-75.52	333.37
529	SANAE	B13	-70.31	357.64
587	SYOWA	B13	-69.00	39.58
137	DAVIS	B13	-68.58	77.96
80	CAMPBELL ISLAND	B13	-52.50	169.20
304	KERGUELEN	B13	-49.44	70.42
154	DUNEDIN	B13	-45.79	170.48
251	HOBART	B13	-42.50	147.20
763	WELLINGTON	B13	-41.23	174.92
246	HERMANUS	B13	-34.42	19.23

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
36	ATIBAIA, ITAPETINGA	B13	-23.50	313.50
759	SAO PAULO	B13	-23.50	313.50
1029	RIO DE JANEIRO	B13	-22.87	316.87
1038	TANANARIVE	B13	-18.92	47.55
1032	BELEM	B13	1.39	311.56
1041	PIARCO	B13	10.60	298.65
1020	MAKAPUU PT	B13	21.31	202.35
736	AHMEDABAD	B13	23.01	72.60
290	KAGOSHIMA	B13	31.48	130.71
1011	BERMUDA	B13	32.26	295.12
526	SAKUSHIMA	B13	34.73	137.05
633	TOYOKAWA	B13	34.82	137.39
966	CHUBU	B13	35.27	137.01
776	INUBO	B13	35.70	140.85
300	KASHIMA	B13	35.95	140.65
580	SUGADAIRA	B13	36.51	138.35
1035	NORFOLK	B13	36.82	285.71
1017	SARDINIA	B13	39.18	9.16
1026	BOULDER	B13	40.00	254.74
749	ROBURENT	B13	44.30	7.88
410	MOSHIRI	B13	44.36	142.27
409	MOSHIRI	B13	44.36	142.27
752	TORINO	B13	45.05	7.75
1023	LA MOURE	B13	46.56	261.36
465	POITIERS	B13	46.60	.30
610	TIHANY	B13	46.90	17.89
338	LEICESTER	B13	52.00	359.00
791	SOGRA	B13	62.80	46.25
467	POKER FLAT	B13	65.13	212.55
1014	HESTMONA	B13	66.53	12.85
314	KIRUNA	B13	67.83	20.42
707	TROMSO	B13	69.70	19.00
710	BEAR ISLAND	B13	74.50	19.20

B14 ATMOSPHERIC RADIO NOISE

814	USHUAIA	B14	-54.80	291.70
247	HERMANUS	B14	-34.42	19.22
1031	RIO DE JANEIRO	B14	-22.87	316.87
1040	TANANARIVE	B14	-18.92	47.55
1034	BELEM	B14	1.39	311.56
1043	PIARCO	B14	10.60	298.65
1022	MAKAPUU PT	B14	21.31	202.35
462	PING-CHENG	B14	24.95	121.23
1013	BERMUDA	B14	32.26	295.12
963	CHUBU	B14	35.27	137.01
1037	NORFOLK	B14	36.82	285.71
1019	SARDINIA	B14	39.18	9.16
1028	BOULDER	B14	40.00	254.74
625	EBRO	B14	40.82	.49
657	VALLEY COTTAGE	B14	41.07	286.45
311	KINGSTON	B14	41.31	288.27
1025	LA MOURE	B14	46.56	261.36
1058	TIHANY	B14	46.90	17.89
806	VSETIN	B14	49.21	17.59
804	ONDREJOV	B14	49.92	14.98
799	UPICE	B14	50.30	16.01
982	KUHLUNGSBORN	B14	54.12	11.77
1015	HESTMONA	B14	66.53	12.85

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
B15 PARTIAL REFLECTION DATA				
735	AHMEDABAD	B15	23.01	72.60
652	URBANA	B15	40.17	271.84
708	TROMSO	B15	69.70	19.00
C01 H-ALPHA FLARES				
1062	EBRO	C01	40.82	.49
1006	MEUDON	C01	48.80	2.23
400	MEUDON	C01	48.80	2.23
643	UCCLE	C01	50.80	4.35
242	HAUTE PROVENCE	C01	43.93	5.72
1067	UECHT	C01	46.85	7.27
1080	ARCETRT	C01	43.75	11.25
743	ROME	C01	41.90	12.50
962	KANZELHOEHE	C01	46.68	13.91
769	CAPRI F	C01	40.55	14.22
802	ONDREJOV	C01	49.92	14.98
97	CATANIA	C01	37.50	15.08
273	HURBANOVO	C01	47.87	15.21
797	UPICE	C01	50.30	16.01
1051	SKALNATE PLESO	C01	49.19	20.25
1150	ATHENS	C01	37.85	23.72
907	PENTELI	C01	38.05	23.86
933	BUCHAREST	C01	44.41	26.05
960	KANDILLI	C01	41.06	29.06
597	TEL AVIV	C01	32.10	34.50
1112	TEHRAN	C01	35.70	51.47
764	KODAIKANAL	C01	10.20	77.50
998	MANILA	C01	14.64	121.08
999	MANILA	C01	14.64	121.08
1060	TOKYO	C01	35.67	139.54
129	CULGOORA	C01	-30.33	149.57
1118	PALEHUA	C01	21.38	201.93
226	HALEAKALA	C01	20.71	203.74
58	BIG BEAR	C01	34.16	243.49
57	BIG BEAR	C01	34.16	243.49
502	SACRAMENTO PEAK	C01	32.78	254.68
498	SACRAMENTO PEAK	C01	32.78	254.68
929	BOULDER	C01	39.98	254.72
1076	MCMATH-HULBERT	C01	42.66	276.74
1122	RAMEY	C01	18.50	292.80
934	BUENOS AIRES	C01	-34.55	301.27
C02 SOLAR LOCAL MAGNETIC FIELDS				
1140	POTSDAM	C02	52.38	13.07
59	BIG BEAR	C02	34.16	243.49
980	KITT PEAK	C02	31.96	248.40
930	BOULDER	C02	39.98	254.72

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
C03 SOLAR RADIO EVENTS, FIXED FREQUENCY				
433	NANCAY	C03	44.40	2.20
1086	DWINGELOO	C03	52.81	6.40
647	UECHT	C03	46.85	7.27
646	UECHT	C03	46.85	7.27
158	DURNTEN	C03	47.38	8.85
1084	ARCETRI	C03	43.75	11.25
746	ROME	C03	41.90	12.50
1064	TREMSDORF	C03	52.28	13.13
1065	TRIESTE	C03	45.64	13.88
1066	TRIESTE	C03	45.64	13.88
801	ONDREJOV	C03	49.92	14.98
796	UPICE	C03	50.30	16.01
1090	TORUN	C03	53.10	18.55
1151	ATHENS	C03	37.85	23.72
908	PENTELI	C03	38.05	23.86
978	KISLOVODSK	C03	44.70	42.50
732	AHMEDABAD	C03	23.01	72.60
858	IRKUTSK	C03	52.47	104.03
1000	MANILA	C03	14.64	121.08
964	CHUBU	C03	35.27	137.01
950	HIRAISO	C03	36.37	140.63
130	CULGOORA	C03	-30.32	149.57
1119	PALEHUA	C03	21.38	201.93
989	LA POSTA	C03	32.40	243.50
919	BOULDER	C03	40.10	254.75
775	PENN STATE U	C03	40.82	282.13
236	HAMILTON	C03	42.25	289.00
1160	SAGAMORE HILL	C03	42.63	289.18
330	LA PAZ	C03	-16.30	291.91
827	BUENOS AIRES	C03	-34.55	301.27
1078	ATIBAIA, ITAPETINGA	C03	-23.50	313.50
559	SLOUGH	C03	51.49	359.44
C04 SOLAR RADIO SPECTROGRAMS OF EVENTS				
1087	DWINGELOO	C04	52.81	6.40
159	DURNTEN	C04	47.28	8.85
805	ONDREJOV	C04	49.92	14.98
731	AHMEDABAD	C04	23.01	72.60
1001	MANILA	C04	14.64	121.08
441	NOBEYAMA	C04	35.93	138.48
936	CULGOORA	C04	-30.32	149.57
173	HARVARD	C04	30.63	256.48
522	SAGAMORE HILL	C04	42.63	289.18
C05 SOLAR X-RAY OBSERVATIONS				
923	BOULDER	C05	39.98	254.72

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ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST
C06 SUDDEN IONOSPHERIC DISTURBANCES				
1063	EBRO	C06	40.82	.49
617	TORINO	C06	45.05	7.67
1018	SARDINIA	C06	39.18	9.16
24	ARCETRI	C06	43.75	11.26
983	KUHLUNGSBORN	C06	54.12	11.77
1015	HESTMONA	C06	66.53	12.85
917	BELSK	C06	51.84	20.79
1152	ATHENS	C06	37.85	23.72
1039	TANANARIVE	C06	-18.92	47.55
593	TANANARIVE	C06	-18.55	47.55
1113	TEHRAN	C06	35.70	51.47
940	GULMARG	C06	34.07	74.42
438	NISHINOMIYA	C06	34.72	135.38
965	CHUBU	C06	35.27	137.01
951	HIRAISO	C06	36.37	140.63
277	INUBO	C06	35.70	140.86
1120	PALEHUA	C06	21.38	201.93
1021	MAKAPUU PT	C06	21.31	202.35
990	LA POSTA	C06	32.40	243.50
1027	BOULDER	C06	40.00	254.74
350	LITTLETON	C06	39.63	255.02
1024	LA MOURE	C06	46.56	261.36
574	ST. CLOUD	C06	45.57	265.81
1077	MCMATH-HULBERT	C06	42.66	276.74
334	LATROBE	C06	40.28	280.72
1036	NORFOLK	C06	36.82	285.71
1068	VALLEY COTTAGE	C06	41.07	286.45
511	SAGAMORE HILL	C06	42.63	289.18
481	RAMEY	C06	18.50	292.80
1012	BERMUDA	C06	32.26	295.12
1042	PIARCO	C06	10.60	298.65
1033	BELEM	C06	1.39	311.56
541	SAO PAULO	C06	-23.17	313.43
1030	RIO DE JANEIRO	C06	-22.87	316.87
942	HALLEY BAY	C06	-75.52	333.37
477	PRESTON	C06	53.77	357.30
C07 SOLAR PROTONS AND ELECTRONS - DIRECT MEASUREMENT				
1125	RAMEY	C07	18.52	292.90
924	BOULDER	C07	39.98	254.72
422	MURMANSK	C07	68.95	33.05
C08 SOLAR PROTONS - RIOMETER				
943	HALLEY BAY	C08	-75.52	333.37
937	DAVIS	C08	-68.58	77.96
909	PENTELI	C08	38.05	23.86
C13 COSMIC RAY GROUND LEVEL INCREASES				
1047	SANAE	C13	-70.31	357.64
1153	SANAE	C13	-70.31	357.64

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
D01 GEOMAG STANDARD AND RAPID RUN MEASUREMENTS				
911	GENERAL BELGRANO	D01	-77.97	321.20
544	SCOTT BASE	D01	-77.81	166.76
554	SIPLE	D01	-76.00	276.00
232	HALLEY BAY	D01	-75.52	333.22
530	SANAE	D01	-70.32	357.66
138	DAVIS	D01	-68.58	77.96
3	ADELAIDE ISLAND	D01	-67.76	291.08
692	MAWSON	D01	-67.60	62.86
691	MAWSON	D01	-67.60	62.86
603	TERRE ADELIE	D01	-66.67	140.00
91	CASEY	D01	-66.54	110.36
28	ARGENTINE ISLANDS	D01	-65.25	295.73
376	MACQUARIE ISLAND	D01	-54.50	158.95
378	MACQUARIE ISLAND	D01	-54.50	158.95
567	SOUTH GEORGIA	D01	-54.28	323.52
305	PORT AUX FRANCAIS	D01	-49.35	70.21
392	MARION	D01	-46.88	37.85
127	PORT ALFRED	D01	-46.43	51.87
754	TRELEW	D01	-43.25	294.68
17	AMBERLEY	D01	-43.16	172.75
615	TOOLANGI	D01	-37.53	145.47
85	CANBERRA	D01	-35.31	149.00
86	CANBERRA	D01	-35.29	149.30
753	LAS ACACIAS	D01	-35.00	302.32
249	HERMANUS	D01	-34.42	19.22
248	HERMANUS	D01	-34.42	19.22
213	GRAHAMSTOWN	D01	-33.32	26.50
202	GNANGARA	D01	-31.78	115.95
238	HARTEBEESTHOEK	D01	-25.88	27.71
535	CACHOEIRA PAULISTA	D01	-22.88	314.61
639	TSUMEB	D01	-19.20	17.58
456	PAPEETE (PAMATAI)	D01	-17.55	188.23
23	APIA	D01	-13.80	188.22
163	KARAVIA	D01	-11.65	27.47
472	PORT MORESBY	D01	-9.42	147.15
133	DAR ES SALAAM	D01	-6.77	39.22
61	BINZA	D01	-4.37	15.25
171	EUSEBIO	D01	-3.88	321.57
428	NAIROBI	D01	-1.33	36.81
78	CAMBRIDGE BAY	D01	0.	255.00
77	RUAMPARA - BUNIA	D01	1.53	30.02
48	BANGUI	D01	4.44	18.56
458	PARAMARIBO	D01	5.81	304.79
134	DAVAO	D01	7.08	125.58
637	TRIVANDRUM	D01	8.48	76.95
323	KODAIKANAL	D01	10.23	76.95
688	ZARIA	D01	11.15	7.65
20	ANNAMALAINAGAR	D01	11.37	79.68
220	GUAM	D01	13.59	144.87
219	GUAM	D01	13.59	144.87
421	MUNTINLUPA	D01	14.38	121.02
1103	MBOUR	D01	14.39	343.04
390	MANILA	D01	14.64	121.08
45	BAGUIO	D01	16.41	120.58
274	HYDERABAD	D01	17.42	78.55
539	SAN JUAN	D01	18.12	293.85
538	SAN JUAN	D01	18.12	293.85

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST
10	ALIBAG	D01	18.64	72.87
270	HONOLULU	D01	21.32	201.99
267	HONG KONG	D01	22.36	114.22
737	AHMEDABAD	D01	23.01	72.60
648	UJJAIN	D01	23.02	75.78
366	LUNPING	D01	25.00	121.17
552	SHILLONG	D01	25.57	91.88
285	JAIPUR	D01	26.92	75.79
108	CHICHIJIMA	D01	27.09	142.18
599	TENERIFE	D01	28.48	343.72
493	SABHAWALA	D01	30.37	77.80
295	KANOYA	D01	31.42	130.88
641	TUCSON	D01	32.25	249.17
640	TUCSON	D01	32.25	249.17
991	LA POSTA	D01	32.40	243.50
406	MIYAZU	D01	35.32	135.11
756	TEHRAN	D01	35.70	51.40
291	KAKIOKA	D01	36.23	140.21
532	MARINA	D01	36.47	353.80
16	ALMERIA	D01	36.85	357.54
95	CASTLE ROCK	D01	37.23	237.87
550	SEOUL	D01	37.23	126.57
848	ASHKHABAD	D01	37.90	58.40
1071	WALLOPS ISLAND	D01	37.94	284.53
35	PENDELI	D01	38.05	23.86
181	FREDERICKSBURG	D01	38.20	282.63
180	FREDERICKSBURG	D01	38.20	282.63
614	TOLEDO	D01	39.88	355.95
68	BOULDER	D01	40.13	254.77
626	EBRO	D01	40.82	.49
294	KANDILLI	D01	41.06	29.06
332	L AQUILA	D01	42.38	13.31
667	WESTON	D01	42.43	288.68
352	LOGRONO	D01	42.45	357.50
1101	MCMATH-HULBERT	D01	42.66	276.74
832	ALMA ATA	D01	43.25	76.92
869	USSURISK	D01	43.68	132.17
395	MEMAMBETSU	D01	43.91	144.19
490	ROBURENT	D01	44.30	7.88
450	OTTAWA	D01	45.40	284.45
834	NOVOKAZALINSK	D01	45.76	62.12
829	ODESSA	D01	46.78	30.88
1059	TIHANY	D01	46.90	17.89
870	YUZHNO-SAKHALINSK	D01	46.93	142.70
358	LORING AFB	D01	46.95	292.12
576	ST. JOHNS	D01	47.60	307.32
425	NAGYCENK	D01	47.63	16.72
807	HURBANOVO	D01	47.87	18.18
182	FUERSTENFELDBRUCK	D01	48.17	11.28
660	VICTORIA	D01	48.52	236.58
819	BUDKOV	D01	49.07	14.02
672	WINNIPEG	D01	49.63	262.87
836	KARAGANDA	D01	49.81	73.08
830	LVOV	D01	49.90	23.75
824	DOURBES	D01	50.10	4.60
849	KIEV	D01	50.72	30.30
239	HARTLAND	D01	50.99	355.52

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ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST
363	LUCKY LAKE	D01	51.15	252.74
654	VALENTIA	D01	51.93	349.75
1009	NIEMEGK	D01	52.07	12.68
865	IRKUTSK	D01	52.17	104.45
673	WITTEVEEN	D01	52.81	6.67
674	WITTEVEEN	D01	52.81	6.67
669	WINGST	D01	53.74	9.07
668	WINGST	D01	53.74	9.07
577	STONYHURST	D01	53.84	357.53
875	MINSK PLESHCHENITSY	D01	53.90	27.50
761	YORK	D01	53.97	358.92
443	NORWAY HOUSE	D01	53.98	262.17
1154	WARNKENHAGEN	D01	54.00	11.07
1104	MEANOOK	D01	54.62	246.67
217	GREAT WHALE RIVER	D01	55.30	282.25
855	MOSCOW	D01	55.41	37.41
606	THOMPSON	D01	55.72	262.12
783	COPENHAGEN	D01	55.85	12.45
190	GILLAM	D01	56.35	265.32
866	SVERDLOVSK	D01	56.82	60.60
557	SITKA	D01	57.06	224.67
572	SOUTH UIST	D01	57.36	352.61
856	BOROK	D01	58.02	38.20
115	FORT CHURCHILL	D01	58.80	265.90
857	LENINGRAD	D01	59.56	30.16
1091	UPPSALA	D01	59.80	17.60
174	FORT SMITH	D01	60.00	248.00
868	MAGADAN	D01	60.00	151.00
343	LERWICK	D01	60.13	358.82
168	ESKIMO POINT	D01	61.10	265.93
867	YAKUTSK	D01	62.02	129.72
151	DOMBAS	D01	62.07	9.12
685	YELLOWKNIFE	D01	62.48	245.53
484	RANKIN INLET	D01	62.63	268.08
341	LEIRVOGUR	D01	64.18	338.30
342	LEIRVOGUR	D01	64.18	338.30
46	BAKER LAKE	D01	64.33	263.97
370	LYCKSELE	D01	64.62	18.67
1107	EIELSON AFB	D01	64.70	213.00
119	COLLEGE	D01	64.86	212.15
118	COLLEGE	D01	64.87	212.17
205	COLLEGE	D01	64.87	212.17
785	KEM	D01	65.00	34.40
468	POKER FLAT	D01	65.13	212.52
177	FORT YUKON	D01	66.56	214.78
786	APATITY	D01	67.55	33.30
315	KIRUNA	D01	67.83	20.42
25	ARCTIC VILLAGE	D01	68.13	214.43
279	INUVIK	D01	68.25	226.70
19	ANDOYA	D01	69.29	16.02
638	TROMSO	D01	69.66	18.94
49	BARROW	D01	71.30	203.25
871	TIXIE BAY	D01	71.60	128.90
50	BEAR ISLAND	D01	74.51	19.02
487	RESOLUTE BAY	D01	74.60	265.10
412	MOULD BAY	D01	76.20	240.60
608	THULE/CAMP TUTO	D01	76.55	291.17
445	NY-ALESUND	D01	78.92	11.93
7	ALERT	D01	82.50	297.50

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ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST
D02	**MAGNETOSPHERIC MICROPULSATION PHENOMENA**			
555	SIPLE	D02	-76.00	276.00
663	VOSTOK	D02	-78.45	106.87
1048	SIPLE	D02	-76.00	276.00
233	HALLEY BAY	D02	-75.52	333.22
840	NOVOLAZAREVSKAYA	D02	-70.77	11.82
1045	SANAE	D02	-70.31	357.64
139	DAVIS	D02	-68.58	77.96
92	CASEY	D02	-66.54	110.36
379	MACQUARIE ISLAND	D02	-54.50	158.95
377	MACQUARIE ISLAND	D02	-54.50	158.95
568	SOUTH GEORGIA	D02	-54.28	323.52
81	CAMPBELL ISLAND	D02	-52.50	169.20
306	KERGUELEN	D02	-49.44	70.42
155	DUNEDIN	D02	-45.79	170.48
335	LAUNCESTON	D02	-41.67	147.16
41	AUCKLAND	D02	-36.51	174.45
250	HERMANUS	D02	-34.42	19.22
1157	HERMANUS	D02	-34.42	19.23
716	CAMDEN	D02	-32.75	151.50
420	MUNDARING	D02	-32.00	116.20
676	WOOMERA	D02	-31.10	136.78
760	NGOYA	D02	-28.83	31.88
2	ADDIS ABABA	D02	9.03	38.77
1002	MANILA	D02	14.64	121.08
111	CHICHIJIMA	D02	27.09	142.18
1054	TENERIFE	D02	28.48	343.72
296	KANOYA	D02	31.42	130.88
434	NEWCASTLE	D02	32.75	151.50
292	KAKIOKA	D02	36.23	140.19
1061	TOLEDO	D02	39.88	355.95
925	BOULDER	D02	39.98	254.72
69	BOULDER	D02	40.14	254.76
627	EBRO	D02	40.82	.49
970	KINGSTON	D02	41.31	288.27
333	L AQUILA	D02	42.38	13.31
396	MEMAMBETSU	D02	43.91	144.19
750	ROBURENT	D02	44.30	7.88
451	OTTAWA	D02	45.20	284.50
426	NAGYCENK	D02	47.63	16.72
183	FUERSTENFELDBRUCK	D02	48.17	11.28
435	NEWPORT	D02	48.26	242.88
820	BUDKOV	D02	49.07	14.02
553	SIDMOUTH	D02	50.67	356.75
240	HARTLAND	D02	50.99	355.52
241	HARTLAND	D02	51.00	355.52
655	VALENTIA	D02	51.93	349.75
1010	NIEMEGK	D02	52.07	12.68
675	WITTEVEEN	D02	52.82	6.67
1072	WINGST	D02	53.74	9.07
578	STONYHURST	D02	53.84	357.53
687	YORK	D02	53.95	358.95
686	YORK	D02	53.97	358.92
1155	WARNKENHAGEN	D02	54.00	11.07
218	GREAT WHALE RIVER	D02	55.26	282.22
166	ESKDALEMUIR	D02	55.32	356.80
1088	EARLYBURN	D02	55.73	356.77

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
773	BOROK	D02	58.03	38.97
837	BOROK	D02	58.03	38.33
345	LERWICK	D02	60.10	358.82
344	LERWICK	D02	60.13	358.82
120	COLLEGE	D02	64.86	212.17
121	COLLEGE	D02	64.86	212.15
453	OULU	D02	65.08	25.87
469	POKER FLAT	D02	65.13	212.54
838	MIRNY	D02	66.58	93.02
564	SODANKYLA	D02	67.32	26.63
609	THULE	D02	76.60	291.20
839	HEISS ISLAND	D02	80.62	58.05
D03	**SPACE MAGNETISM**			
926	BOULDER	D03	39.98	254.72
E01	**ALL-SKY CAMERA (AURORA)**			
570	SOUTH POLE	E01	-90.00	0.
881	VOSTOK	E01	-78.40	106.90
912	GENERAL BELGRANO	E01	-77.97	321.20
545	ARRIVAL HEIGHTS	E01	-77.83	166.65
556	SIPLE	E01	-76.00	276.00
234	HALLEY BAY	E01	-75.52	333.22
880	NOVOLAZAREVSKAYA	E01	-70.80	11.80
781	SANAE	E01	-70.30	357.65
140	DAVIS	E01	-68.58	77.96
693	MAWSON	E01	-67.61	62.88
604	TERRE ADELIE	E01	-66.67	140.00
879	MIRNY	E01	-66.60	93.00
93	CASEY	E01	-66.54	110.36
380	MACQUARIE ISLAND	E01	-54.50	158.95
82	CAMPBELL ISLAND	E01	-52.25	169.15
307	PORT AUX FRANCAIS	E01	-49.35	70.22
542	SASKATOON	E01	52.21	252.81
423	MURPHY DOME	E01	64.50	211.45
371	LYCKSELE	E01	64.62	18.67
470	POKER FLAT	E01	64.80	212.37
124	COLLEGE	E01	64.86	212.15
107	CHATANIKA	E01	65.10	212.57
179	FORT YUKON	E01	66.56	214.78
178	FORT YUKON	E01	66.56	214.78
316	KIRUNA	E01	67.84	20.42
280	INUVIK	E01	68.25	226.70
496	SACHS HARBOR	E01	72.00	235.00
876	DIXON	E01	73.50	80.40
413	MOULD BAY	E01	76.20	240.60
877	CHELYUSKIN	E01	77.80	104.30
878	HEISS ISLAND	E01	80.70	56.20
E02	**VISUAL OBSERVATIONS (AURORA)**			
913	GENERAL BELGRANO	E02	-77.97	321.20
1055	DUMONT DURVILLE	E02	-66.67	140.00
83	CAMPBELL ISLAND	E02	-52.55	169.15
967	PORT AUX FRANCAIS	E02	-49.35	70.22

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST
E03 OTHER OPTICAL TECHNIQUES (AURORA)				
914	GENERAL BELGRANO	E03	-77.97	321.20
547	ARRIVAL HEIGHTS	E03	-77.83	166.65
546	ARRIVAL HEIGHTS	E03	-77.83	166.65
1046	SANAE	E03	-70.31	357.64
1056	DUMONT DURVILLE	E03	-66.67	140.00
968	PORT AUX FRANCAIS	E03	-49.35	70.22
489	BATTELLE	E03	46.40	240.40
788	PARATUNKA	E03	52.58	158.14
787	LENINGRAD	E03	59.95	30.70
372	LYCKSELE	E03	64.62	18.76
373	LYCKSELE	E03	64.62	18.67
317	KIRUNA	E03	67.84	20.42
E04 RADIO AND RADAR OBSERVATIONS (AURORA)				
548	SCOTT BASE	E04	-77.75	167.50
588	SYOWA	E04	-69.00	39.35
1102	MAWSON	E04	-67.61	62.88
94	CASEY	E04	-66.54	110.36
984	KUHLUNGSBORN	E04	54.12	11.77
122	COLLEGE	E04	64.87	212.18
318	KIRUNA	E04	67.83	20.33
F01 NEUTRON MONITORS AND SUPERMONITORS				
915	GENERAL BELGRANO	F01	-77.97	321.20
531	SANAE	F01	-70.31	357.64
714	MAWSON	F01	-67.60	62.80
605	TERRE ADELIE	F01	-66.67	140.02
308	KERGUELEN	F01	-49.35	70.25
713	HOBART	F01	-42.92	147.20
256	HERMANUS	F01	-34.42	19.22
712	BRISBANE	F01	-27.53	152.92
473	POTCHEFSTROOM	F01	-26.66	27.08
102	CHACALTAYA	F01	-16.35	291.87
271	HUANCAYO	F01	-12.03	284.67
402	MEXICO	F01	19.33	260.82
738	AHMEDABAD	F01	23.01	72.60
488	REWA	F01	24.32	81.17
221	GULMARG	F01	34.07	74.42
612	TOKYO	F01	35.75	139.72
415	MT NORIKURA	F01	36.11	137.55
551	SEOUL	F01	37.32	126.56
184	FUKUSHIMA	F01	37.75	140.48
784	ATHENS	F01	37.96	23.70
117	CLIMAX	F01	39.37	253.82
407	MORIOKA	F01	39.70	141.13
147	DENVER	F01	39.75	255.00
594	TASHKENT	F01	41.33	69.61
492	ROMA	F01	41.90	12.52
461	PIC DU MIDI	F01	42.93	.25
42	BAGNERES	F01	43.08	.15
157	DURHAM	F01	43.10	289.17
11	ALMA-ATA	F01	43.25	76.92
418	MT WASHINGTON	F01	44.30	288.70
145	DEEP RIVER	F01	46.10	282.50
289	JUNGFRAUJOCH	F01	46.55	7.98

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	LONG EAST
475	PREDIGTSTUHL	F01	47.70	12.88
355	LOMNICKY STIT	F01	49.20	20.22
0	DOURBES	F01	50.10	4.60
153	DOURBES	F01	50.10	4.60
851	KIEV	F01	50.72	30.30
790	CALGARY	F01	51.08	245.90
789	SULPHUR MOUNTAIN	F01	51.20	244.39
653	UTRECHT	F01	52.06	5.07
872	IRKUTSK	F01	52.47	104.03
210	GOOSE BAY	F01	53.27	299.60
336	LEEDS	F01	53.82	358.40
309	KIEL	F01	54.30	10.10
853	IZMIRAN	F01	55.47	37.32
678	YAKUTSK	F01	62.02	129.72
21	APATITY	F01	67.50	33.33
26	ARCTIC VILLAGE	F01	68.13	214.43
281	INUVIK	F01	68.35	226.28
874	NORILSK	F01	69.00	88.00
843	TIXIE BAY	F01	71.60	129.00
8	ALERT	F01	82.50	297.67

F02 IONIZATION CHAMBERS (COSMIC RAYS)

269	HONG KONG	F02	22.42	114.20
613	TOKYO-ITABASHI	F02	35.75	139.72
416	MT NORIKURA	F02	36.11	137.55
679	YAKUTSK	F02	62.02	129.72

F03 MESON TELESCOPE (COSMIC RAYS)

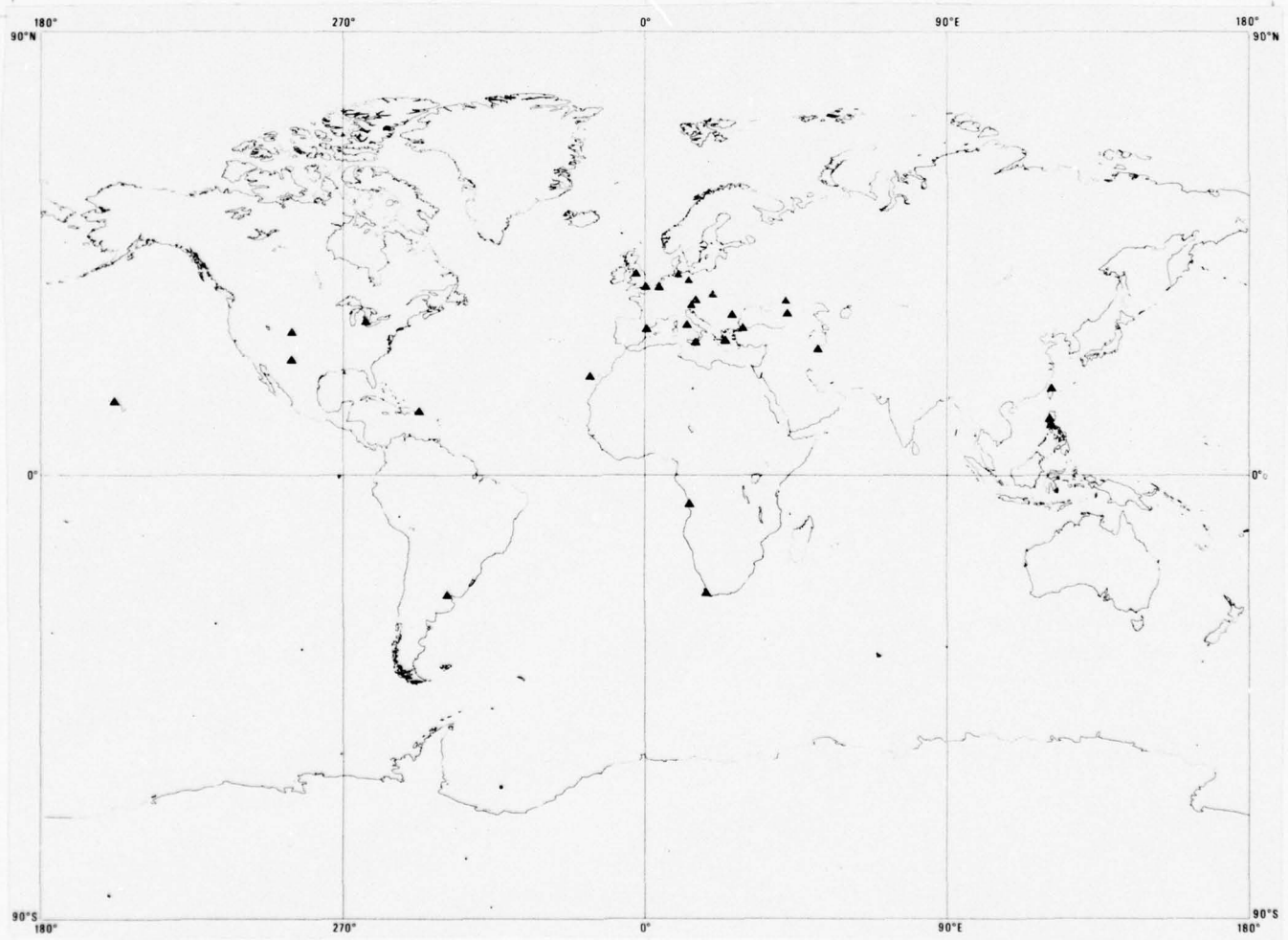
823	MAWSON	F03	-67.60	62.80
715	HOBART	F03	-42.92	147.20
103	CHACALTAYA	F03	-16.31	291.80
1007	MEXICO	F03	19.33	260.82
733	AHMEDABAD	F03	23.01	72.60
563	SOCORRO	F03	34.04	253.07
424	NAGOYA	F03	35.15	136.97
164	EMBUDO	F03	35.20	253.32
592	TAKEYAMA	F03	35.22	139.62
417	MT NORIKURA	F03	36.11	137.55
1052	DENVER	F03	39.75	255.00
13	ALMA-ATA	F03	43.25	76.92
146	DEEP RIVER	F03	46.10	282.50
740	BUDAPEST	F03	47.49	18.96
701	DOURBES	F03	50.10	4.60
700	UTRECHT	F03	52.08	5.13
873	IRKUTSK	F03	52.47	104.03
211	GOOSE BAY	F03	53.27	299.60
165	ESKDALEMUIR	F03	55.32	356.80
681	YAKUTSK	F03	62.02	129.72
22	APATITY	F03	67.50	33.33
282	INUVIK	F03	68.35	226.28
9	ALERT	F03	82.50	297.67

ITEM	STATION NAME	SUB DISC	GEOGRAPHIC LAT	GEOGRAPHIC LONG EAST
F04 BALLOON MEASUREMENTS (COSMIC RAYS)				
405	MIRNY	F04	-66.57	92.92
15	ALMA-ATA	F04	43.25	76.92
14	ALMA-ATA	F04	43.25	76.92
408	MOSCOW	F04	55.93	37.52
1008	MURMANSK	F04	68.95	33.05
G01 AIRGLOW				
782	SANAE	G01	-70.30	357.65
1057	DUMONT DURVILLE	G01	-66.67	140.00
969	PORT AUX FRANCAIS	G01	-49.35	70.22
128	PORT ALFRED	G01	-46.43	51.87
1156	HOBART	G01	-42.90	147.20
33	ASPENDALE	G01	-38.02	145.07
771	BEVERIDGE	G01	-37.47	144.93
777	ADELAIDE	G01	-34.60	138.40
581	SUTHERLAND	G01	-32.38	20.81
762	EL LEONCITO	G01	-31.80	290.70
459	PERTH	G01	-31.56	115.50
71	BRISBANE	G01	-27.50	152.90
536	CACHOEIRA PAULISTA	G01	-22.70	314.80
207	ARECIBO	G01	18.35	293.25
31	ARECIBO	G01	18.35	293.25
1106	TENERIFE	G01	28.48	343.72
321	KISO	G01	35.80	137.63
88	VELETA	G01	37.10	356.58
739	NIIGATA	G01	37.70	138.82
844	ASHKHABAD	G01	37.90	58.40
767	LAUREL RIDGE	G01	40.16	280.84
243	HAUTE PROVENCE	G01	43.92	5.72
1161	TSIMLJANSK	G01	47.70	42.00
1093	VICTORIA	G01	48.46	236.70
356	LOMNICKY STIT	G01	49.18	20.22
1162	ZVENIGOROD	G01	55.70	36.80
1	ABERDEEN	G01	57.15	357.87

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5. MAPS ILLUSTRATING STATION LOCATIONS

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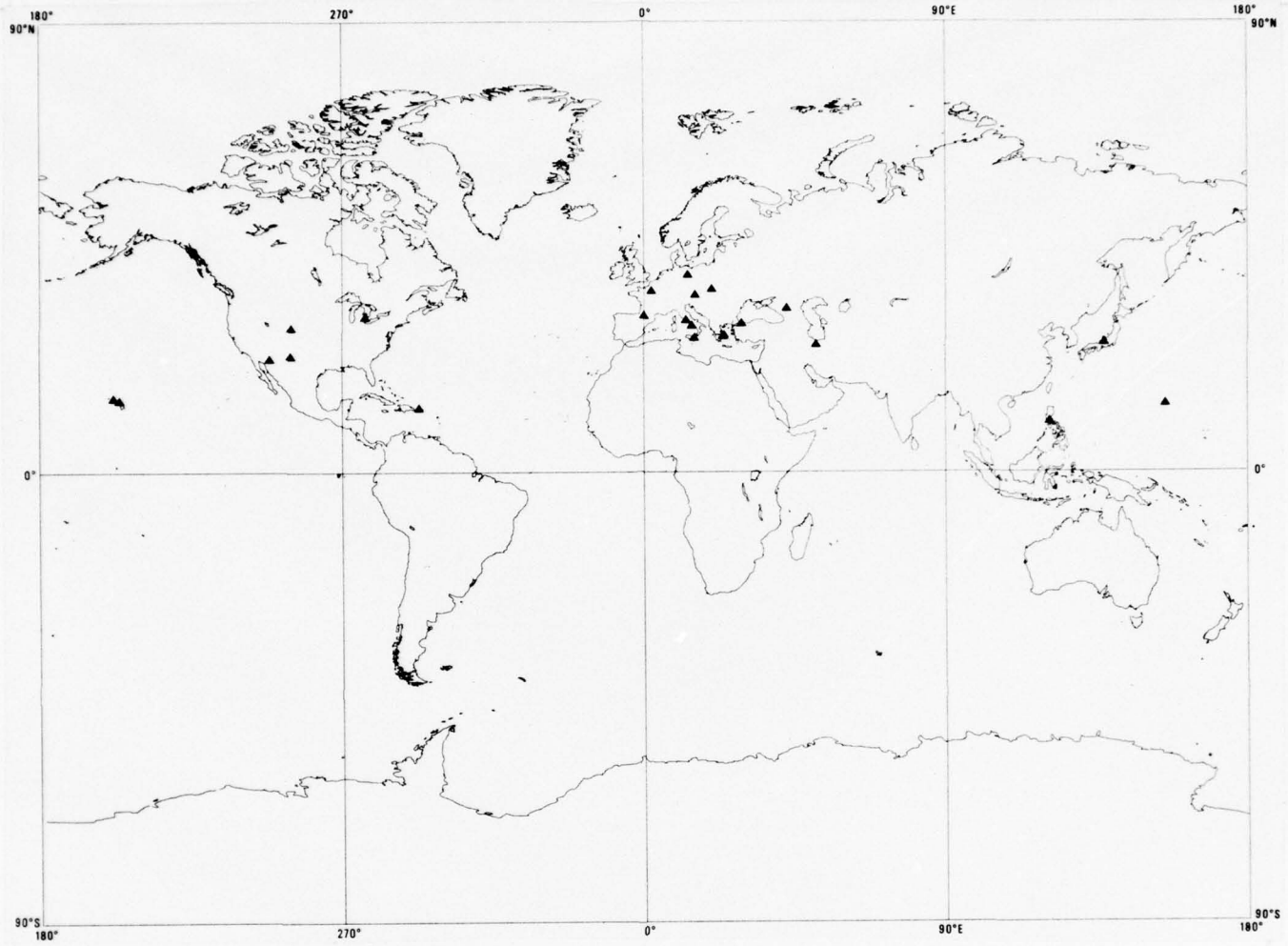
MONSEE STATION DISTRIBUTION:

AO1 SUNSPOT POSITIONS, AREAS, AND CLASSIFICATIONS
AO2 SUNSPOT NUMBERS

90°S 180° 270° 0° 90°E 180° 90°S

MONSEE STATION DISTRIBUTION:
A01 SUNSPOT POSITIONS, AREAS, AND CLASSIFICATIONS
A02 SUNSPOT NUMBERS

2

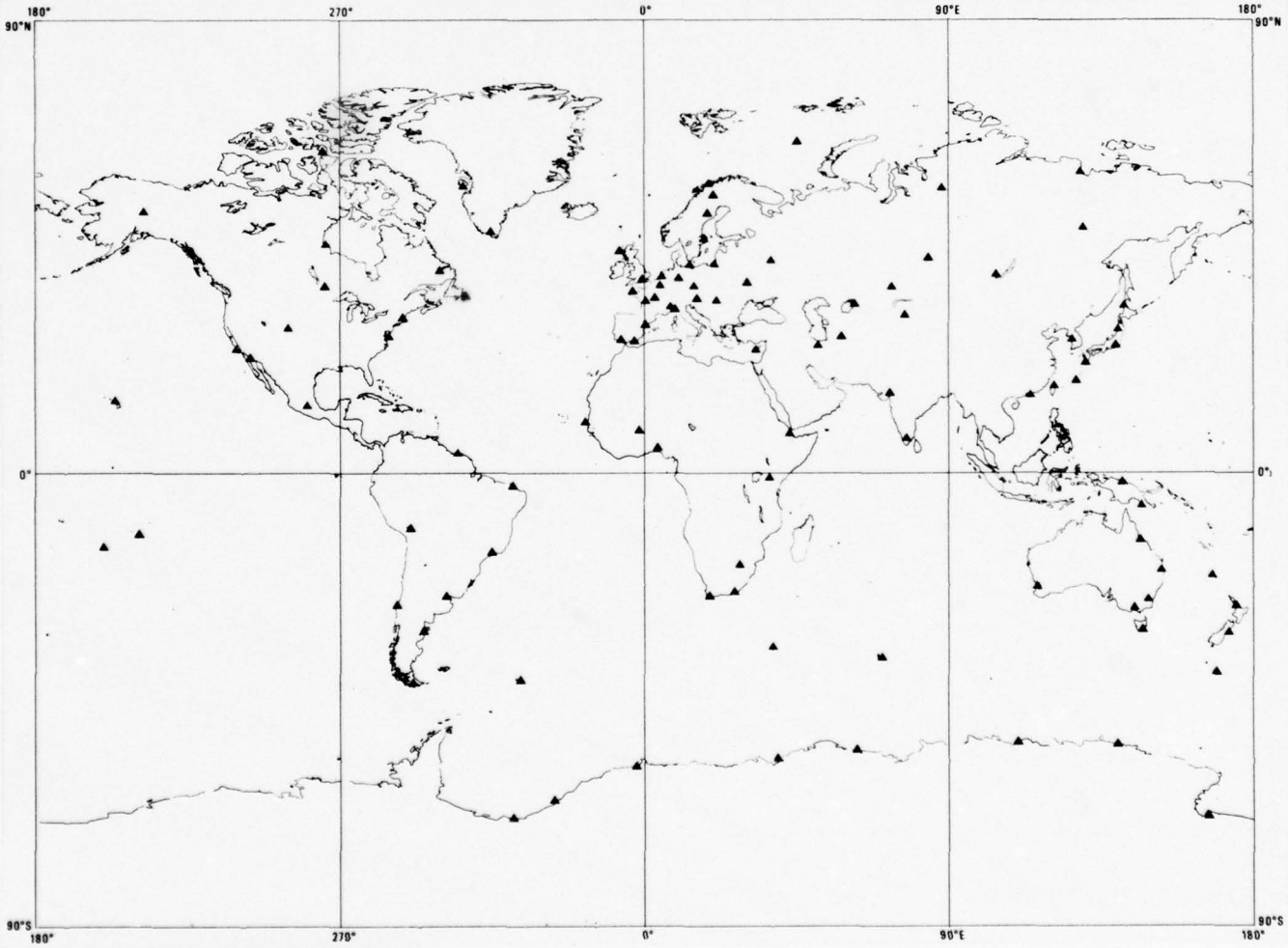


MONSEE STATION DISTRIBUTION:
A05 CALCIUM PLAGES
A06 SOLAR MAPS, PROMINENCES, FILAMENTS
A07 OPTICAL OBSERVATIONS OF THE CORONA

5-1

61

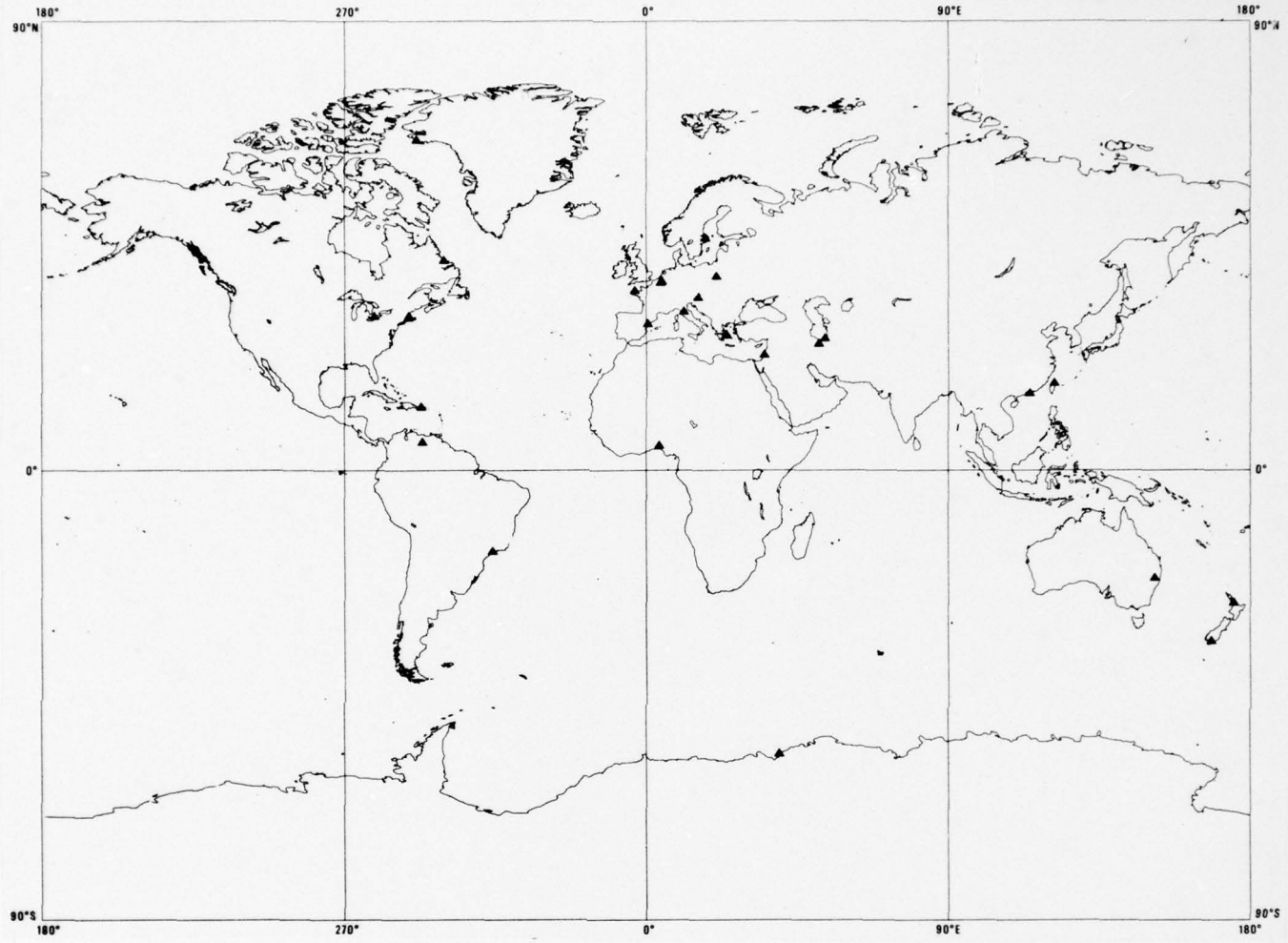
5-1



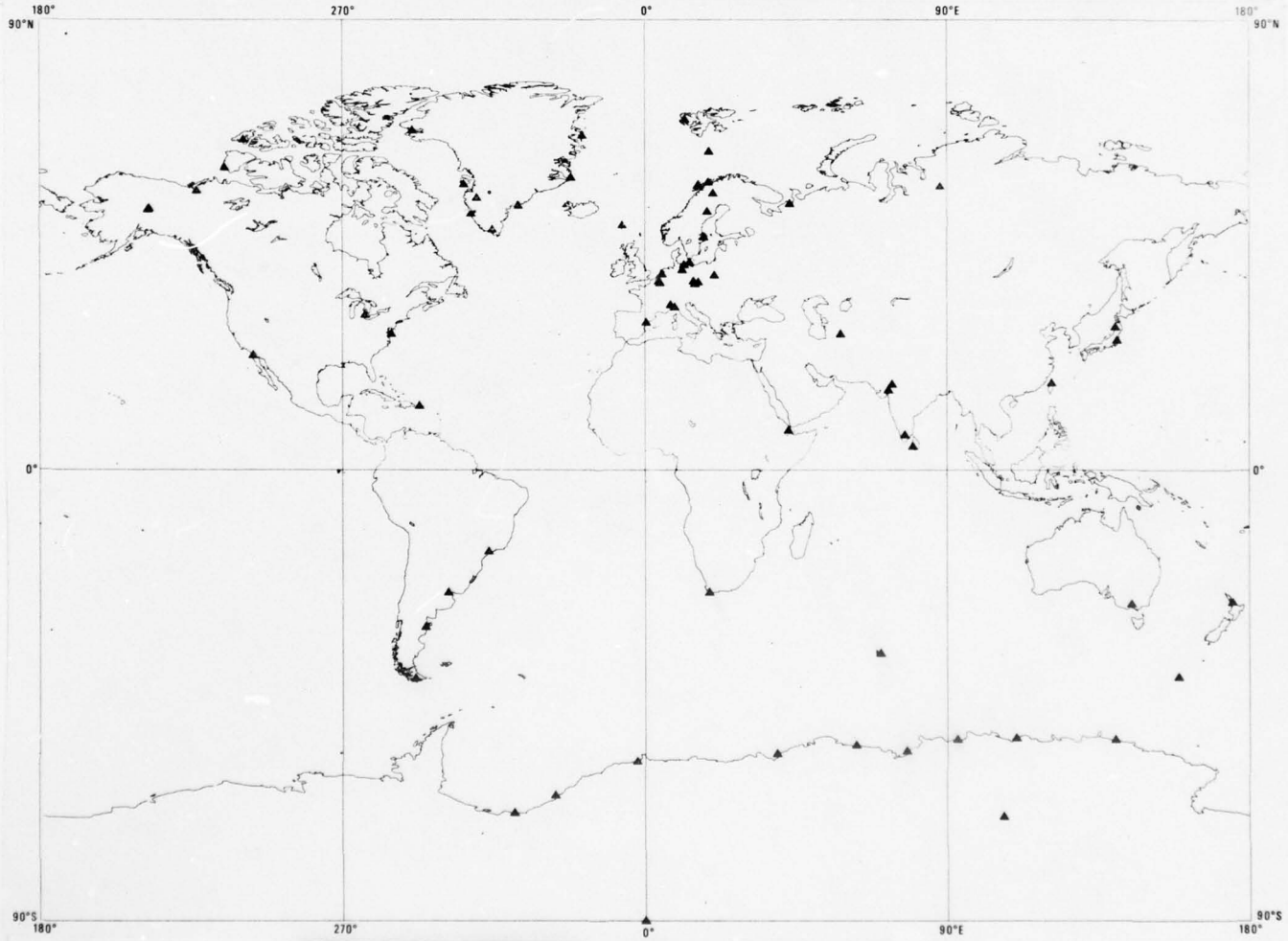
MONSEE STATION DISTRIBUTION:
B01 IONOSPHERE VERTICAL SOUNDINGS



MONSEE STATION DISTRIBUTION:
B01 IONOSPHERE VERTICAL SOUNDINGS



MONSEE STATION DISTRIBUTION:
B06 TOTAL ELECTRON CONTENT - SATELLITE BEACONS

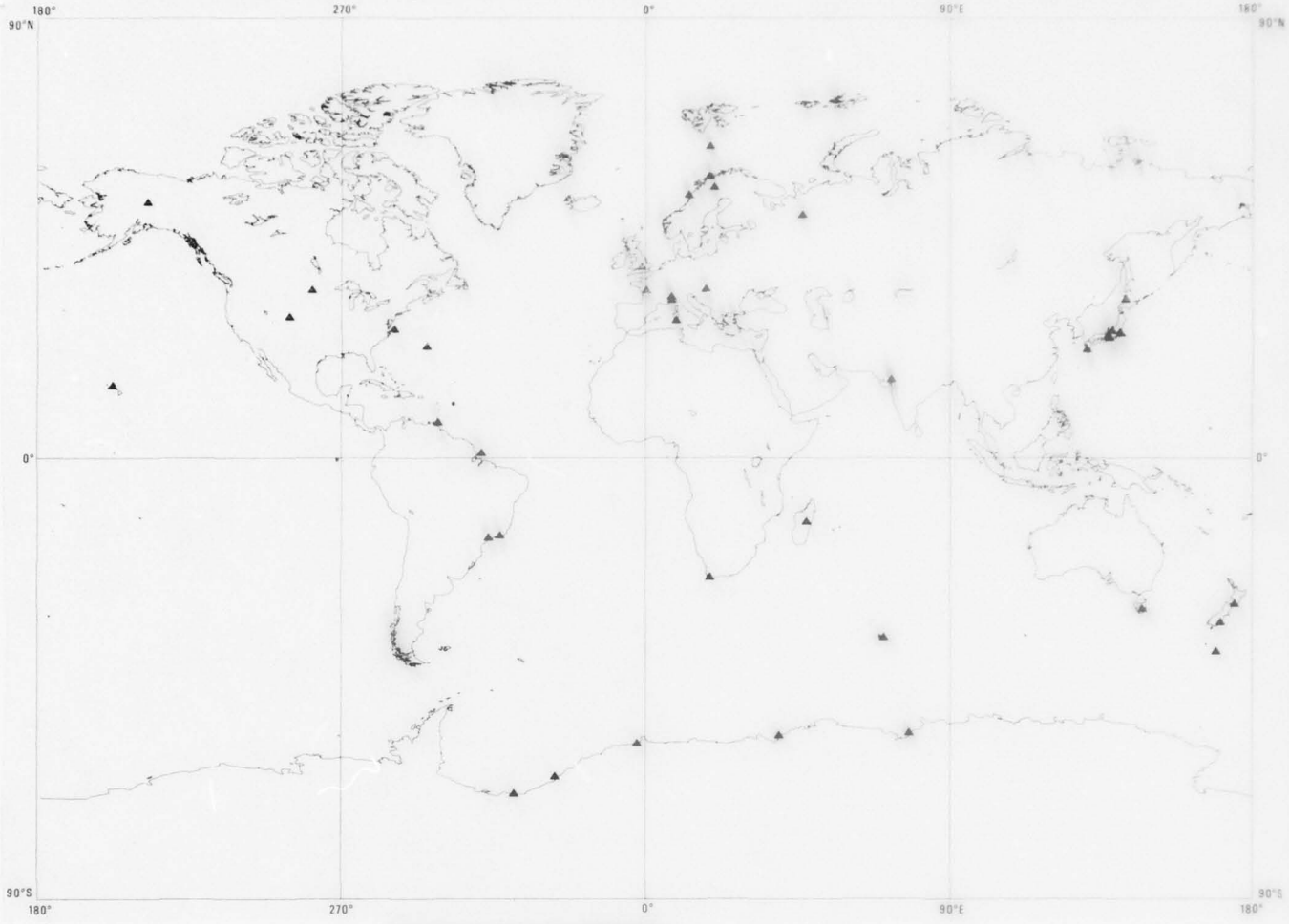


MONSEE STATION DISTRIBUTION:

B07 IONOSPHERIC ABSORPTION - METHOD A1 (PULSE ECHO)
B08 IONOSPHERIC ABSORPTION - METHOD A2 (RIOMETER)
B09 IONOSPHERIC ABSORPTION - METHOD A3 (CW FIELDSTRENGTH)

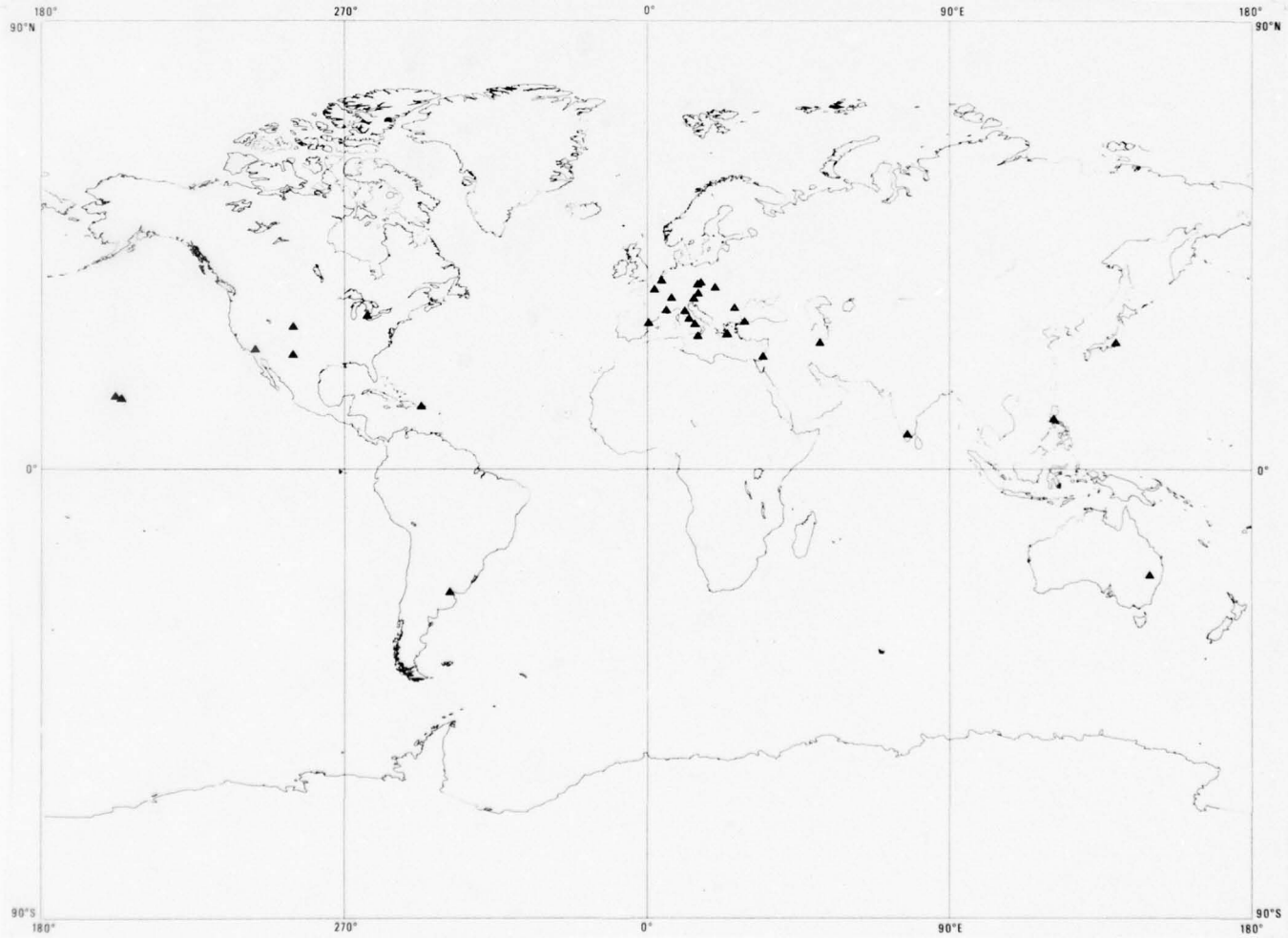
180° 270° 0° 90°E 180°
90°N 90°N

MONSEE STATION DISTRIBUTION:
B07 IONOSPHERIC ABSORPTION - METHOD A1 (PULSE ECHO)
B08 IONOSPHERIC ABSORPTION - METHOD A2 (RIOMETER)
B09 IONOSPHERIC ABSORPTION - METHOD A3 (CW FIELDSTRENGTH)

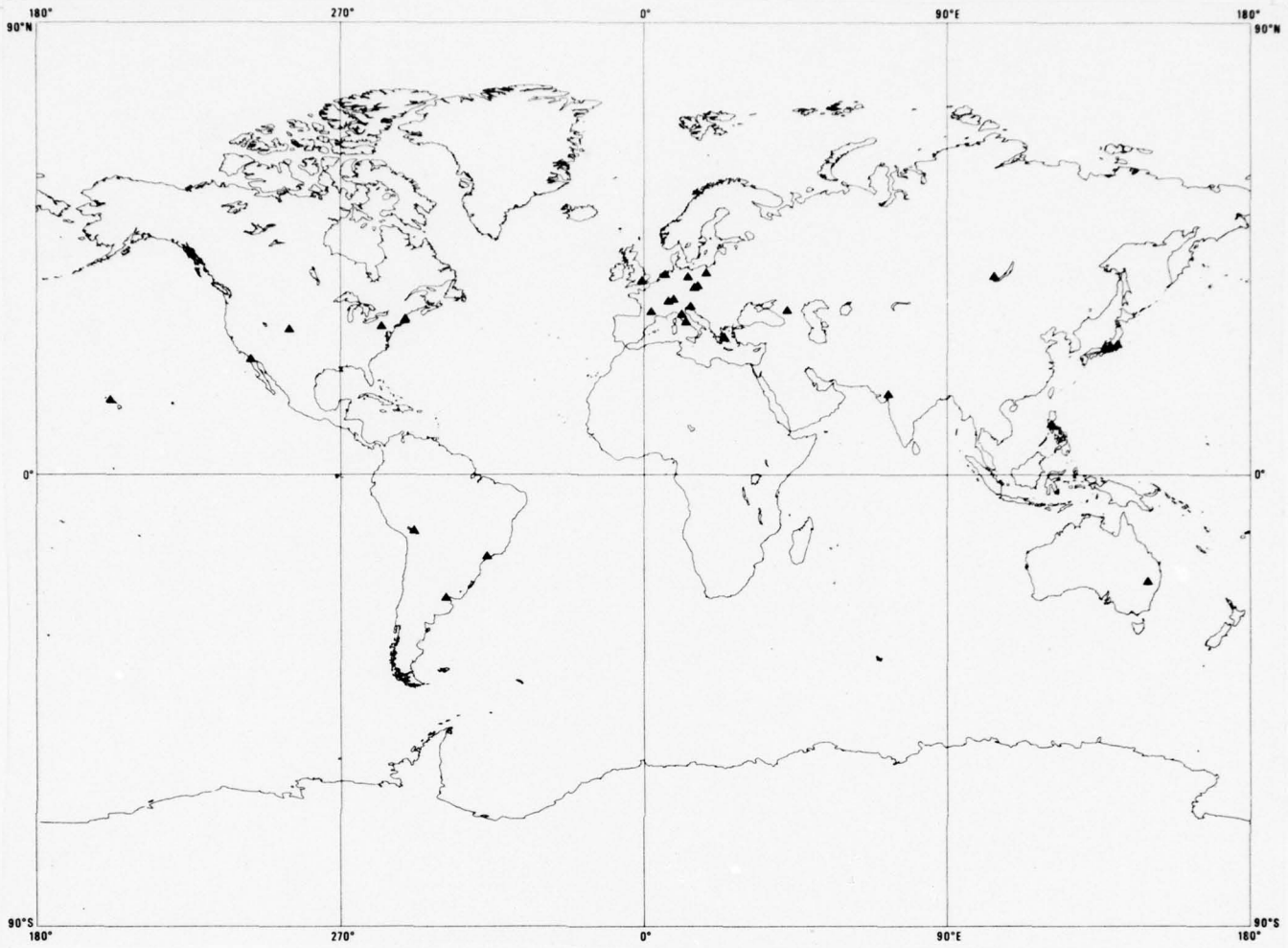


MONSEE STATION DISTRIBUTION:
B13 WHISTLERS AND VLF EMISSIONS

2 - 4 5-3



MONSEE STATION DISTRIBUTION:
CO1 H-ALPHA FLARES



MONSEE STATION DISTRIBUTION:

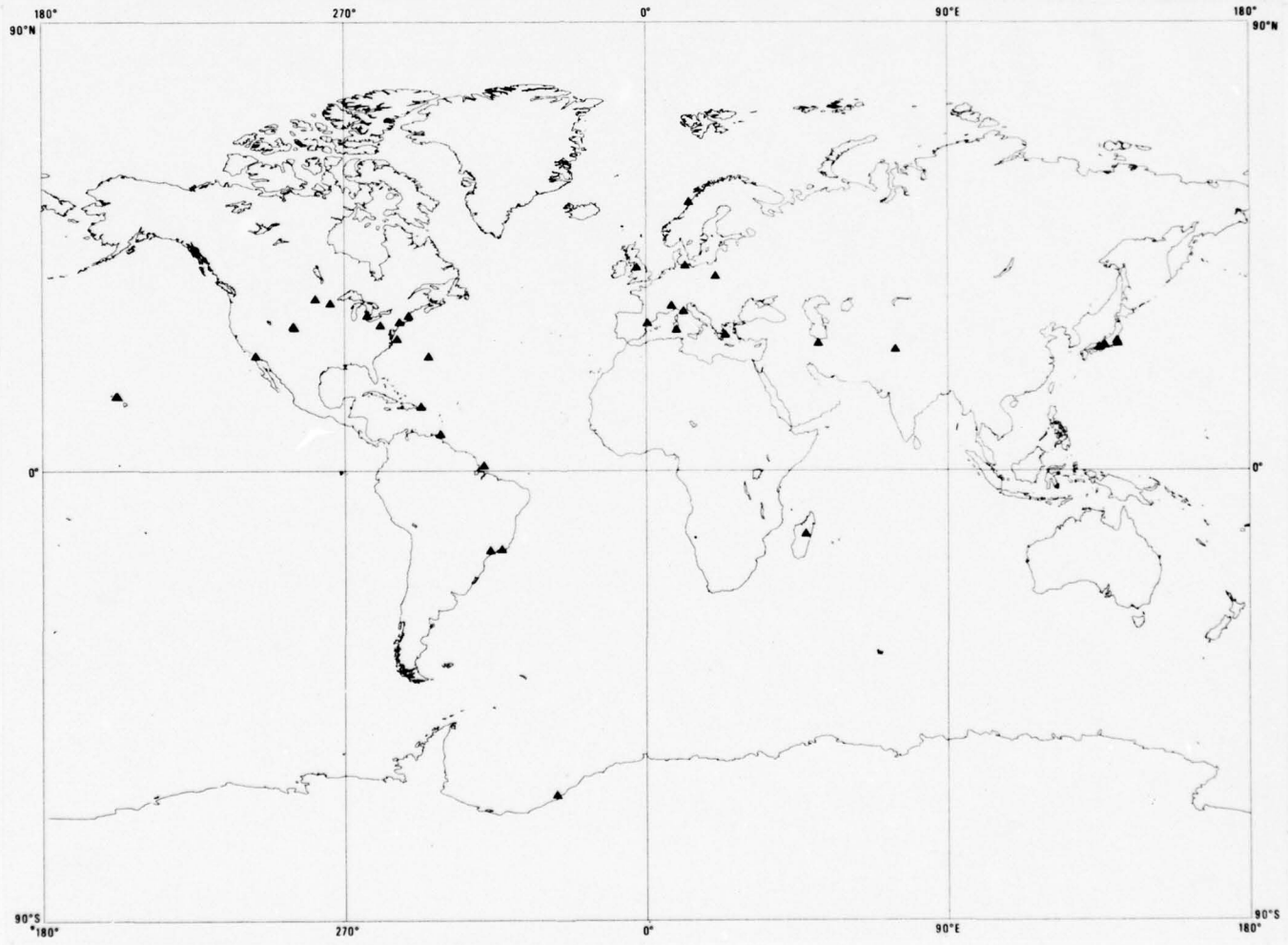
C03 SOLAR RADIO EVENTS, FIXED FREQUENCY
C04 SOLAR RADIO SPECTROGRAMS OF EVENTS

5-4

2

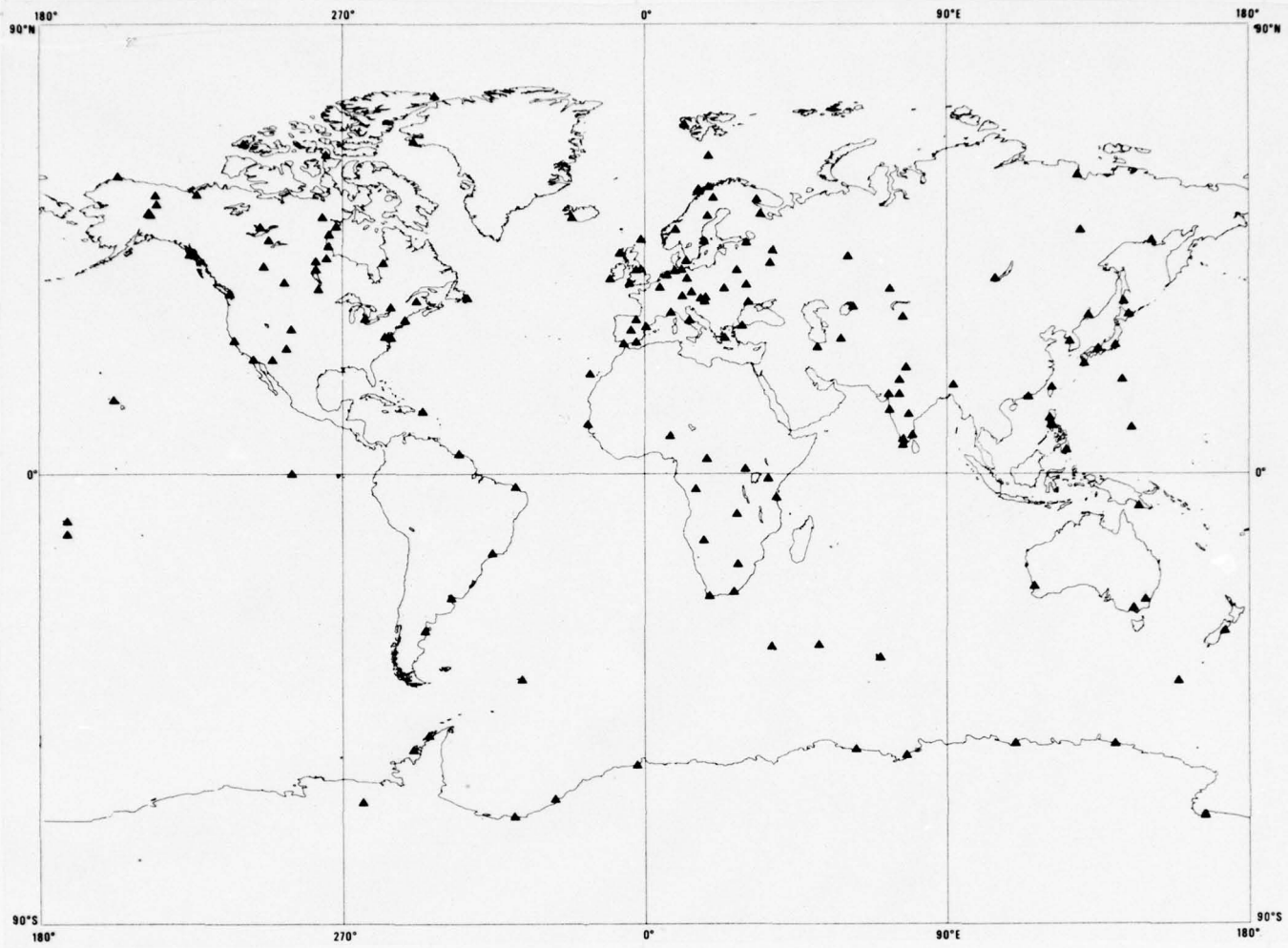
70

5-4

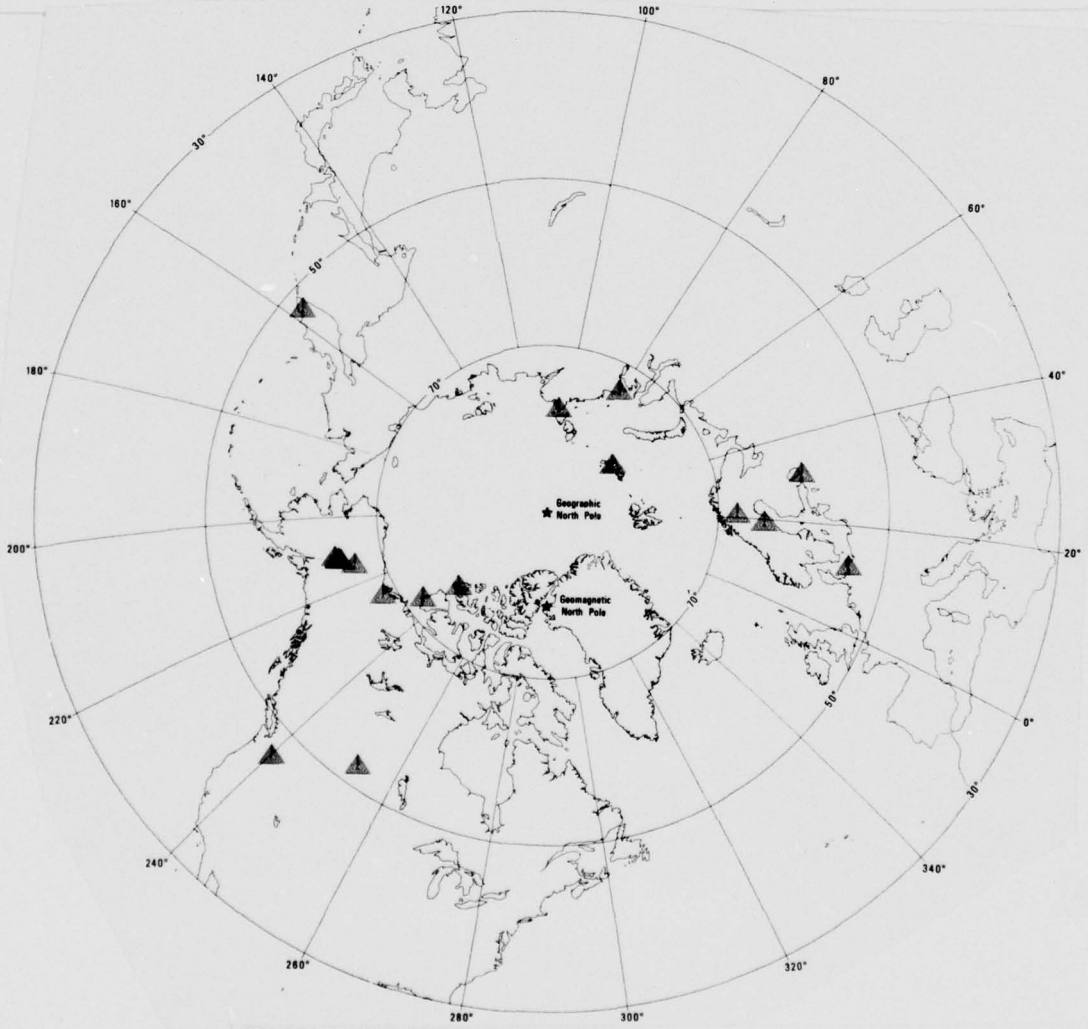


MONSEE STATION DISTRIBUTION:

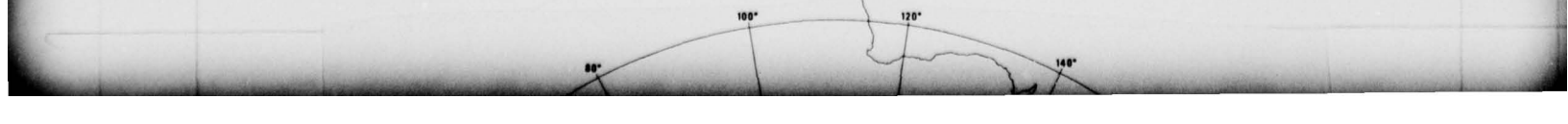
CO6 SUDDEN IONOSPHERIC DISTURBANCES

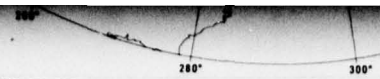


MONSEE STATION DISTRIBUTION:
DO1 GEOMAGNETIC STANDARD AND RAPID RUN MEASUREMENTS

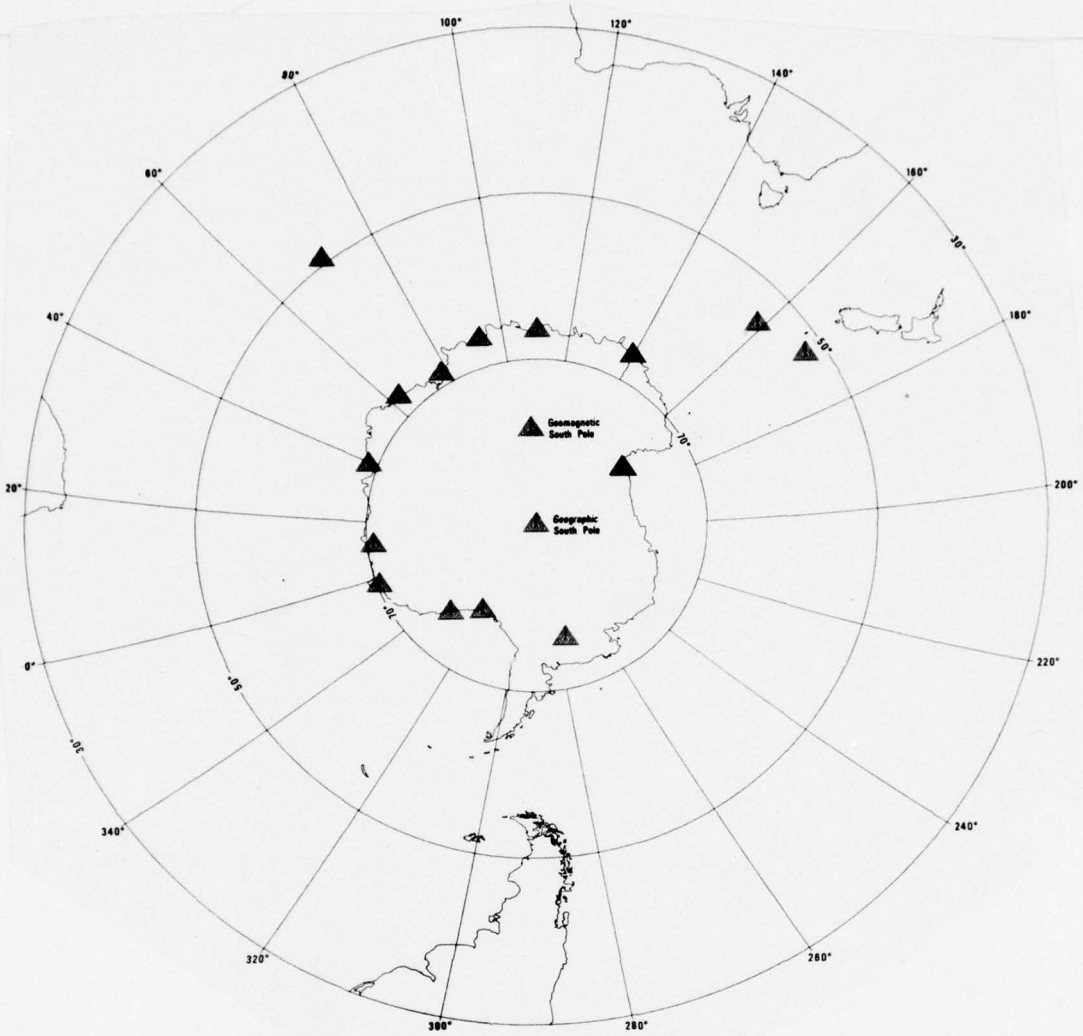


MONSEE STATION DISTRIBUTION: NORTH POLE
E01 ALL-SKY CAMERA (AURORA)
E03 OTHER OPTICAL TECHNIQUES
E04 RADIO AND RADAR OBSERVATIONS

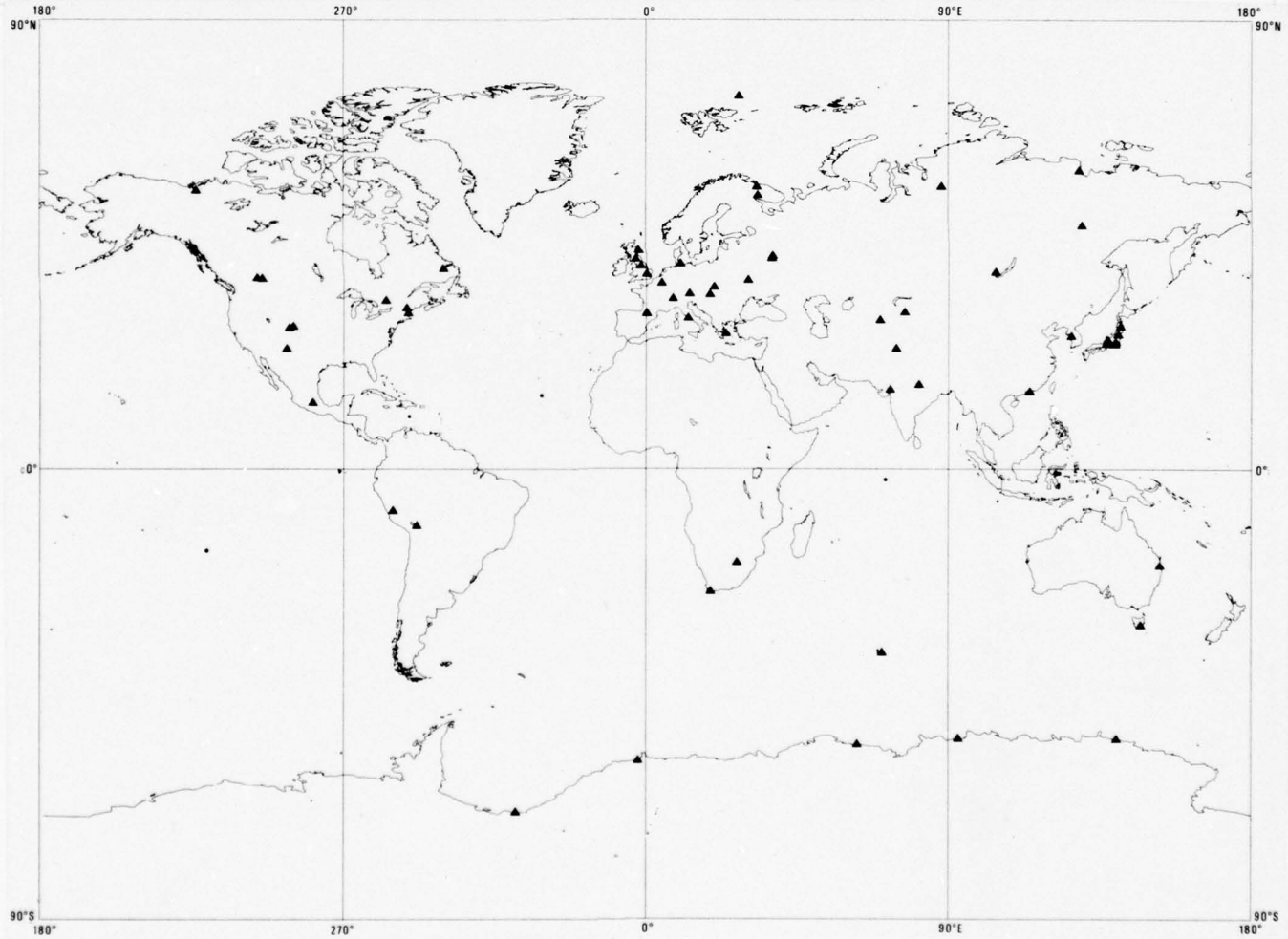




MONSEE STATION DISTRIBUTION: NORTH POLE
E01 ALL-SKY CAMERA (AURORA)
E03 OTHER OPTICAL TECHNIQUES
E04 RADIO AND RADAR OBSERVATIONS



MONSEE STATION DISTRIBUTION: SOUTH POLE
E01 ALL-SKY CAMERA (AURORA)
E03 OTHER OPTICAL TECHNIQUES
E04 RADIO AND RADAR OBSERVATIONS



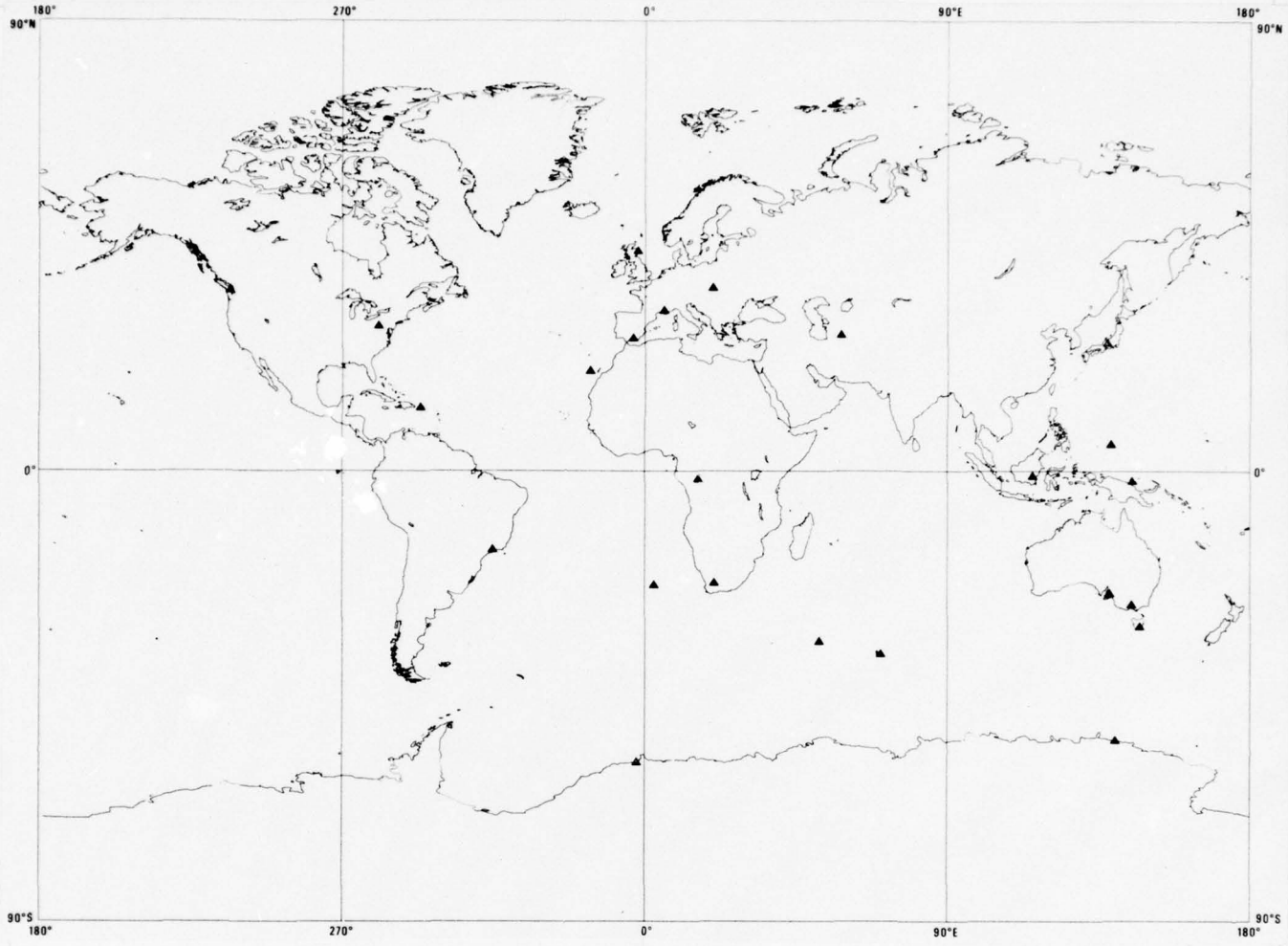
MONSEE STATION DISTRIBUTION:

F01 NEUTRON MONITORS AND SUPERMONITORS (COSMIC RAYS)
F02 IONIZATION CHAMBERS
F03 MESON TELESCOPE
F04 BALLOON MEASUREMENTS

180° 270° 0° 90°E 180°
90°N 90°N

MONSEE STATION DISTRIBUTION:

F01 NEUTRON MONITORS AND SUPERMONITORS (COSMIC RAYS)
F02 IONIZATION CHAMBERS
F03 MESON TELESCOPE
F04 BALLOON MEASUREMENTS



MONSEE STATION DISTRIBUTION:

G01 AIRGLOW

2 73 5-7

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6. STATION ENTRIES BY DISCIPLINE

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A. Solar and Interplanetary Phenomen

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A01 Sunspot Po

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ATHENS
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ITEM: 206
DATE:15/05/75

DISCIPLINE ----------	A01 Sunspot Positions, Areas, and Classificatio
STATION LATITUDE ----------	N 37.85
STATION LONGITUDE ----------	E 23.72
ALTERNATE NAMES ----------	OL-C, 2 Weather Wing
DATES OF OPERATION ----------	12/1965 to present 5/1973 station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	*Razdow WS-250 optical telescope operates from sunrise to sunset daily, takes photos of the solar disk at a rate of 1 frame/min.*
RAW DATA ----------	Film, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA, WDC-A for Solar-Terrestrial Phys Boulder, Colorado USA 80302)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-C, 2 Weather Wing APO New York City NY USA 09223
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

78

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BAGUIO
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ITEM: 44
DATE:18/05/75

DISCIPLINE ----------	A01 Sunspot Positions, Areas, and Classificati
STATION LATITUDE ----------	N 16.41
STATION LONGITUDE ----------	E 120.63

ADDRESS FOR INFORMATION ABOUT STATION ----- OL-C, 2 Weather Wing
APO
New York City NY
USA 09223

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

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BAGUIO
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ITEM: 44
DATE:18/05/75

DISCIPLINE ---------- A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ---------- N 16.41
STATION LONGITUDE ---------- E 120.63
ALTERNATE NAMES ---------- Manila
Mirador (Baguio)
DATES OF OPERATION ---------- 05/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- White light photographs through red filter, 4 inch aperture, f/15 Unitron with 25 mm f. l. eyepiece for enlargement of image. Image is about 90 mm diameter.
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ 0.5 MONTHS
FORM OF REDUCED DATA ---------- Photographic positive, tables
DATA ROUTINELY PUBLISHED ---------- Used as back-up in MAP OF THE SUN
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Manila Observatory
P.O. Box 1231
Manila
Philippines D404

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- No supplemental equipment at Baguio station.

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BOULDER
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ITEM: 64
DATE:18/02/75

DISCIPLINE ---------- A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ---------- N 39.98
STATION LONGITUDE ---------- E 254.72
ALTERNATE NAMES ---------- SOLTERWARN
DATES OF OPERATION ---------- 06/1965 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- White Light Telescope-daily sunspot drawings, original equipment (CRITERION) operated independently. 07/1967, CRITERION telescope piggy backed onto H-alpha telescope. Normal procedure: sunspot drawing, coded reports.
RAW DATA ---------- Sunspot drawings, coded reports
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Sunspot drawings, coded reports
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA, Boulder, Colorado USA 80302)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Space Environment Services Center
Space Environment Lab, ERL, NOAA
325 Broadway
Boulder CO
USA 80302

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data are part of U.S. Flare Patrol Network.

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BUCHAREST
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ITEM: 72
DATE:24/03/75

DISCIPLINE ---------- A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ---------- N 44.41
STATION LONGITUDE ---------- E 26.05
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Heliograph (photosphere), white light photosphere observations; Photographic observations with the heliograph (refractor 13/195 cm) giving a 9 cm solar image.
RAW DATA ---------- Film, photographic plates
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Lists, tables, films, photographic prints

DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Space Environment Services Center
Space Environment Lab, ERL, NOAA
325 Broadway
Boulder CO
USA 80302

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data are part of U.S. Flare Patrol Network.

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BUCHAREST
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ITEM: 72
DATE:24/03/75

DISCIPLINE ---------- A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ---------- N 44.41
STATION LONGITUDE ---------- E 26.05
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Heliograph (photosphere), white light photosphere observations; Photographic observations with the heliograph (refractor 13/195 cm) giving a 9 cm solar image.
RAW DATA ---------- Film, photographic plates
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Lists, tables, films, photographic prints
DATA ROUTINELY PUBLISHED ---------- OBSERVATIONS SOLAIRES, SOLAR-GEO-PHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Meudon, Zurich
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. Calin Popovici
Astronomical Observatory
Cutitul de argint 5
Bucharest
Romania

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 2 months.

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A01 Sunspot Positions, A

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BUENOS AIRES
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ITEM: 74
DATE:24/02/76

DISCIPLINE ----------	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ----------	S 34.55
STATION LONGITUDE ----------	E 301.27
ALTERNATE NAMES ----------	San Miguel
DATES OF OPERATION ----------	01/1940 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Equatorial Mounted Refractor, 18cm aperture, 2.5m focal distance, 2 frames during the day.
RAW DATA ----------	Film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	San Miguel Observatorio Nacional de Fisica Cosmic Av. Mitre 3100 San Miguel Buenos Aires Argentina 1663
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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CATANIA
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ITEM: 99
DATE:03/02/76

DISCIPLINE ----------	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ----------	N 37.50
STATION LONGITUDE ----------	E 15.08
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1970 to present

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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CATANIA
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ITEM: 99
DATE:03/02/76

DISCIPLINE ---------- A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ---------- N 37.50
STATION LONGITUDE ---------- E 15.08
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Refractor 15 cm/223 cm
RAW DATA ---------- Drawings, tables, computer printouts
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer printouts
DATA ROUTINELY PUBLISHED ---------- Pub. of Catania Astrophys. Obs.
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. P. Maffei, Director
Osservatorio Astrofisico
Catania
Italy

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data usually available immediately.

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EBRO
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ITEM: 618
DATE:06/06/75

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 40.32
STATION LONGITUDE	E .49
ALTERNATE NAMES	Tortosa
DATES OF OPERATION	01/1905 to present Operation intermittent
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Equatorial photographic telescope (Mailhat), sunspot position, area and evolution, daily photograph (diameter 10 cm)
RAW DATA	Photographic plates
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	Boletin del Observatorio del Ebro (Heliofisica) published since 1910
DATA SENT TO WDC-A	No
DATA SENT TO WDC-B	No
DATA SENT TO WDC-C	Yes Zurich-Daily Ursigram (USSPS) to Meud
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Observatorio del Ebro Roquetas Tarragona Spain
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Gap: 1936-1939

A01 3 80

A01 Sunspot Positions, A

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HAMBURG
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ITEM: 235
DATE:22/05/75

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 53.64
STATION LONGITUDE	E 9.96
ALTERNATE NAMES	Planetarium Hamburg
DATES OF OPERATION	06/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Palomar f 75/1200 mm Refractor, 40 day rotation cycle as described in ASTRONOMIE BEI TAGESLICHT. A new kind of sunspot statistics which make it impossible to count spots twice. Observations are made in a few groups of Amateur Astronomers in Germany and Greece with different kinds of instruments.
RAW DATA	Drawings, lists
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Lists, graphical plots
DATA ROUTINELY PUBLISHED	Quarterly bulletin GVA Sektion Sonne, Sternkieker GvA, Sterne und Weltraum Dusseldorf Germany
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Andreas Saul Gesellsc fur Volkstumliche Astronomie e Otzenstr. 12 Hamburg FRG Germany 2000
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data uaually available after 12 months. Data sent to VdS Berlin, Germany and Olbers Gesellschaft Bremen. Participants include Eugenides Foundation, M. Papthanassiou, Athens, Greece. Also Olbers Gesellschaft Bremen, Volkssternwarte Darmstadt, and Wilhelm Forster Sternwarte Berlin in Germany.

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reas, and Classifications (Cont.)

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KANDILLI
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ITEM: 293
DATE:23/06/75 3a

DISCIPLINE ---------- A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ---------- N 41.06
STATION LONGITUDE ---------- E 29.06
ALTERNATE NAMES ----------

Istanbul

DATES OF OPERATION ---------
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Solar observations
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Kandilli Observatory
Heliophysics Service
Cengelkoy
Istanbul
Turkey

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available immediately.

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KANZELHOEHE
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ITEM: 297
DATE:27/05/75 3b

DISCIPLINE ---------- A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ---------- N 46.68

ADDITIONAL COMMENTS ----- Special purpose data available immediately.

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KANZELHOEHE
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ITEM: 297
DATE:27/05/75

DISCIPLINE ----------	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ----------	N 46.68
STATION LONGITUDE ----------	E 13.91
ALTERNATE NAMES ----------	Sonnenobs Kanzelhoehe Universitaet Graz
DATES OF OPERATION ---------	05/1944 to present Intermittent operation
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Patrol Telescope, 11/165 cm objective, solar image diameter 25 cm, projection drawings, sporadic photographs of interesting spot groups.
RAW DATA ----------	Drawings, tables
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	URSIGRAM RWC-Darmstadt
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes Zurich
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Sonnenobservatorium Kanzelhoehe Universitaet Graz Sattendorf Austria A-9520
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above

ADDITIONAL COMMENTS ----- Gaps in operation: 8/1966-1/1967 and 5/1967-4/1968.

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A01 Sunspot Positions, A

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KISLOVODSK
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ITEM: 320
DATE:29/04/75

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 44.70
STATION LONGITUDE	E 42.50
ALTERNATE NAMES	
DATES OF OPERATION	06/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	10 cm photoheliograph
RAW DATA	Photographs, tables
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, photographs
DATA ROUTINELY PUBLISHED	SOLAR DATA (Pulkovo Obs), Zurich Quarterly Solar Bulletin, Catalogs of solar activity
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Kislovodsk Station Pulkovo Observatory P.O. Box 1 Kislovodsk USSR 357741
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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LUNPING
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ITEM: 365
DATE:17/06/75

DISCIPLINE	A01 Sunspot positions, Areas and Classifications
STATION LATITUDE	N 25.00
STATION LONGITUDE	E 121.17
ALTERNATE NAMES	
DATES OF OPERATION	06/1967 to present

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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LUNPING
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ITEM: 365
DATE:17/06/75

DISCIPLINE ---------- A01 Sunspot positions, Areas and Classifications
STATION LATITUDE ---------- N 25.00
STATION LONGITUDE ---------- E 121.17
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 06/1967 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Gote telescope with coelostat system, using the method of projection of observed sunspots, one observation for each fine day.
RAW DATA ---------- Drawings, film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts, microfilm
DATA ROUTINELY PUBLISHED ---------- Report of Lunping Observatory, Geomagnetism published by Telecommunication Laboratories, M.O.C., Rep. of China
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Kyoto/Hailsham/Bombay/DeBilt/Gottingen
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Y. N. Huang, Chief, Dept Planning and
Telecommunication Lab, M.O.C.
P.O. Box 71
Chung-Li Taiwan
Republic of China 320

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose observations are usually available after 1 month.

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MANILA
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ITEM: 382
DATE:22/05/75 4a

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 14.65
STATION LONGITUDE	E 121.07
ALTERNATE NAMES	PAGASA
DATES OF OPERATION	01/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Refracting telescope, sunspot number, position and classification - Instrument is a 15 cm Refractor, 250 cm focal length, equatorially mounted. Solar image is projected onto an 8 inch circle and sunspots drawn and counted. Observation time is around 0000h UT daily.
RAW DATA	Drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tabular form
DATA ROUTINELY PUBLISHED	BULLETIN OF ASTRONOMICAL OBSERVATIONS published annually by PAGASA
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Zurich
ADDRESS FOR INFORMATION ABOUT STATION	Astronomical Observatory Natl Geophys and Astronomical Ser PA P.O. Box 2277 Manila Philippines
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Although a months data is reduced and available after 1 months time, it is not published separately but will be contained in the annual Bulletin.

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82

A01 Sunspot Positions, A

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MANILA
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ITEM: 383
DATE:13/05/75

DISCIPLINE	A01 Sunspot Positions, Areas and Classifications
STATION LATITUDE	N 14.64
STATION LONGITUDE	E 121.08
ALTERNATE NAMES	
DATES OF OPERATION	10/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	4 inch aperture Unitron, white light photographs. 4 inch aperture refractor with enlarged image through eyepiece until 1973; image now taken on 35 mm film with prime focus through neutral filter.
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Teletype messages, films, maps
DATA ROUTINELY PUBLISHED	SOLAR MAPS AND ACTIVITY FROM MANILA OBSERVATORY
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Manila Observatory P.O. Box 1231 Manila Philippines D 404
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Form of reduced data--Teletype message to U.S.A.F. for number and area; original film; included with Map of Sun in Ca II (K) for every day (published monthly, to solar observatories). Duplicate instrument at Baguio (Philippines) N16.41 E120.63.

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MANILA
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ITEM: 388
DATE:15/05/75

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 14.52
STATION LONGITUDE	E 121.00
ALTERNATE NAMES	
DATES OF OPERATION	10/1966 to present
OBSERVING SCHEDULE	Regular

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MANILA

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ITEM: 388

DATE: 15/05/75

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 14.52
STATION LONGITUDE	E 121.00
ALTERNATE NAMES	
DATES OF OPERATION	10/1966 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Razdow WS-250 Optical Telescope - Observatory operates daily from sunrise to sunset, 35 mm photos of the solar disk at a rate of 1 frame per min.
RAW DATA	Film, strip charts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Logs, chart rolls
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA, US Dept of Commerce, Boulder, CO USA 80302)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Manila Solar Observatory P.O. Box 1231 Manila Philippines D 404
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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reas, and Classifications (Cont.)

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MCMATH-HULBERT
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ITEM: 1073
DATE:27/03/75

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 42.66
STATION LONGITUDE	E 276.74
ALTERNATE NAMES	
DATES OF OPERATION	1932 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Spectroheliograph, Sunspots
RAW DATA	Films
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	McMath-Hulbert Observatory University of Michigan 895 N. Lake Angelus Road Pontiac MI USA 48055
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MULEMBA
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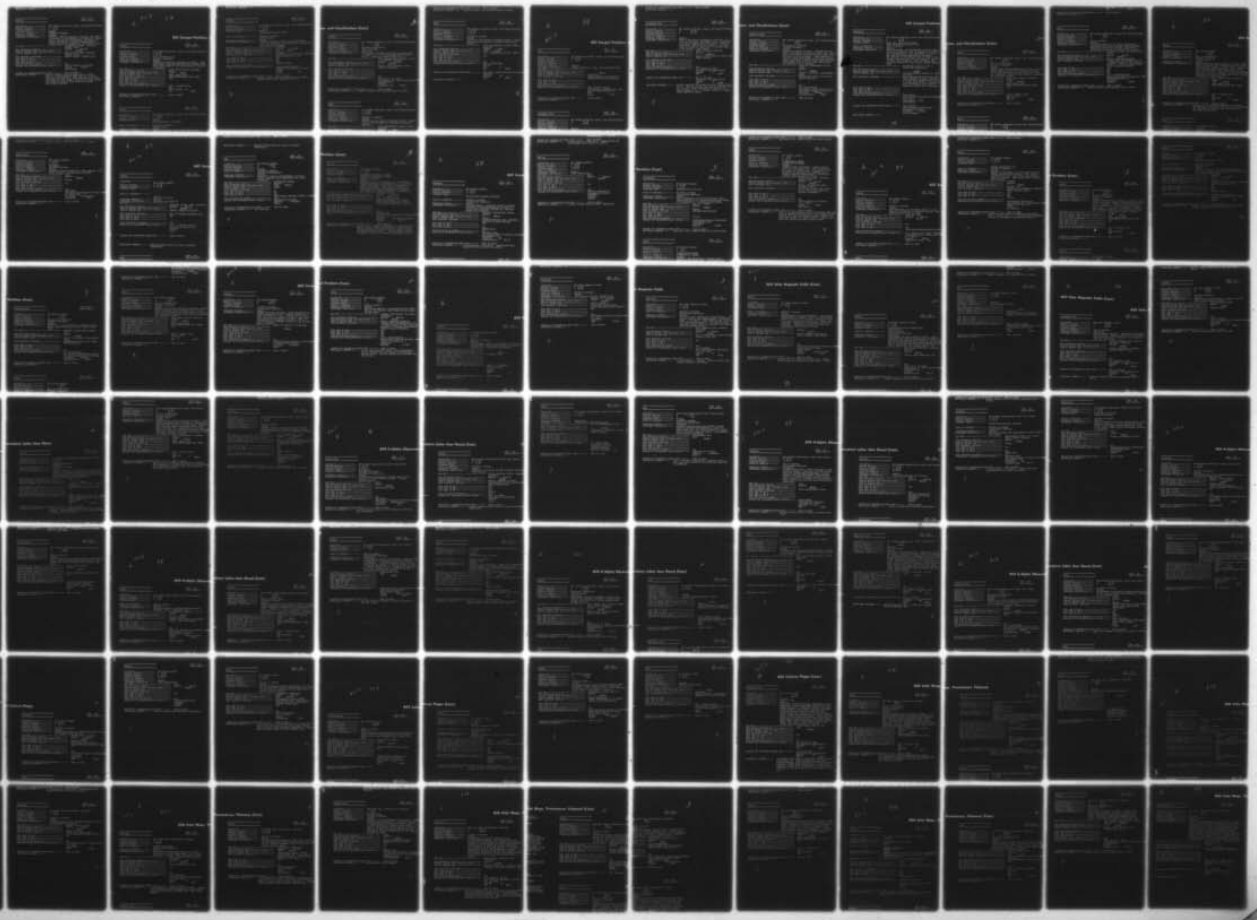
ITEM: 993
DATE:26/02/75

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	S 8.79
STATION LONGITUDE	E 13.31
ALTERNATE NAMES	Luanda
DATES OF OPERATION	09/1973 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Integral light heliograph, 3 mirrors, with heliostat tower, with possibility of direct sun observation, projection, photography, equipment for sunspot heliographic position determination. Future program is installation of H-alpha filter.
RAW DATA	Photographic paper, drawings.

AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

UNCLASSIFIED AFGL-TR-77-0255 NL

2 OF 13
AD
A055001



ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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MULEMBA
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ITEM: 993
DATE:26/02/75

DISCIPLINE ---------- A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ---------- S 8.79
STATION LONGITUDE ---------- E 13.31
ALTERNATE NAMES ---------- Luanda
DATES OF OPERATION ---------- 09/1973 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Integral light heliograph, 3 mirrors, with heliostat tower, with possibility of direct sun observation, projection, photography, equipment for sunspot heliographic position determination. Future program is installation of H-alpha filter.
RAW DATA ---------- Photographic paper, drawings, graphs, lists
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Photographic paper, drawings, graphs, lists
DATA ROUTINELY PUBLISHED ---------- Annual report to Angola Govt
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Centro Espacial Da Mulemba
Luanda Angola
West Africa

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 1 month. Data are on photographic paper when the size of sunspots justifies this, also drawings of the same and graphs of Wolf numbers, as well as lists of sunspot relative numbers from which are derived the graphs (monthly).

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A01 Sunspot Positions, A

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PALEHUA
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ITEM: 455
DATE: 15/05/75

5b

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 21.38
STATION LONGITUDE	E 201.93
ALTERNATE NAMES	OL-D, 1 Weather Wing
DATES OF OPERATION	10/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	RAZDOW W5-120 Optical Telescope (H-alpha); AFGL Telescopes, operates from sunrise to sunset daily Takes 35mm photos of the solar disk at a rate of 1 frame/min.
RAW DATA	Film, strip charts, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Logs, chart rolls
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	OL-D, 1 Weather Wing APO San Francisco CA USA 96553
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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PENTELI
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ITEM: 900
DATE: 18/03/75

5c

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 38.05
STATION LONGITUDE	E 23.86
ALTERNATE NAMES	Athens Natl Observatory of Athens
DATES OF OPERATION	05/1965 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Optical Telescope, White light observations,

ADDITIONAL COMMENTS -----

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PENTELI
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ITEM: 900
DATE: 18/03/75

DISCIPLINE ----------	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ----------	N 38.05
STATION LONGITUDE ----------	E 23.86
ALTERNATE NAMES ----------	Athens Natl Observatory of Athens
DATES OF OPERATION ----------	05/1965 to present Station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Optical Telescope, White light observations, a 10 inch refractor for photographic observation (one picture per minute).
RAW DATA ----------	Drawings
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER -------	0.5 MONTHS
FORM OF REDUCED DATA ----------	Drawings
DATA ROUTINELY PUBLISHED ----------	GEOPHYSICS AND SPACE DATA BULLETIN Space Physics Lab, AFGL
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes Meudon, France
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Astronomical Institute National Observatory of Athens Athens Greece 306
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	Special purpose data available after 0.5 months. Station moved 5/1973 from N37.97 E23.72.

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POTSDAM
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ITEM: 1136
DATE:22/08/76

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 52.38
STATION LONGITUDE	E 13.07
ALTERNATE NAMES	Sonnenobs Einsteinturm
DATES OF OPERATION	1943 to present
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Solar tower telescope with grating spectrograph, f = 1400 cm, d = 60 cm telescope with spectrograph f = 1200 cm, grating 15x15 sm-sq.
RAW DATA	Film, analog paper records, computer printouts, drawings
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Tables, maps, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Dr. F. W. Jager Zentralinst fur solar-terrestrische Ph Telegrafenberg Potsdam German Dem Rep DDR-15
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 6 months.

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RAMEY
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ITEM: 478
DATE:13/03/75

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 18.50
STATION LONGITUDE	E 292.80
ALTERNATE NAMES	
DATES OF OPERATION	08/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	WS-250-1A Solar Optical Telescope System. Razdow white light telescope for sunspots (projection method).
RAW DATA	Film, photographic prints, forms, drawings
DATA REDUCTION PRACTICE	Regular , None

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 6 months.

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RAMEY
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ITEM: 478
DATE:13/03/75

DISCIPLINE ---------- A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ---------- N 18.50
STATION LONGITUDE ---------- E 292.80
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 08/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- WS-250-1A Solar Optical Telescope System. Razdow white light telescope for sunspots (projection method).
RAW DATA ---------- Film, photographic prints, forms, drawings
DATA REDUCTION PRACTICE ---------- Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1/30 MONTHS
FORM OF REDUCED DATA ---------- Film, photographic prints, plots
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- OL-D, 12 WSQ (MAC)
Box 261
FPO NY
USA 09549

ADDRESS FOR INFORMATION ABOUT DATA -------- Natl Geop & Solar-Terrestrial Data Ce
NOAA/EDS
Boulder CO
USA 80302

ADDITIONAL COMMENTS -----

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A01 Sunspot Positions, A

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ROME
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ITEM: 741
DATE:00/00/75

DISCIPLINE ----------	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ----------	N 41.90
STATION LONGITUDE ----------	E 12.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	*Sunspot positions, areas, and classifications*
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Bulletins
DATA ROUTINELY PUBLISHED ----------	SOLAR PHENOMENA, PHOTOGRAPHIC JOURNAL OF THE SUN (monthly)
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. Massimo Cimino Observatorio Astronomico de Roma Via del Parco Mellini, 84 Rome Italy 00136
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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SACRAMENTO PEAK
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ITEM: 500
DATE:23/06/75

DISCIPLINE ----------	A01 Sunspot Position, Areas, and Classifications
STATION LATITUDE ----------	N 32.78
STATION LONGITUDE ----------	E 254.68
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ------

84

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SACRAMENTO PEAK
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ITEM: 500
DATE:23/06/75

DISCIPLINE ---------- A01 Sunspot Position, Areas, and Classifications
STATION LATITUDE ---------- N 32.78
STATION LONGITUDE ---------- E 254.68
ALTERNATE NAMES ----------
DATES OF OPERATION ---------
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- White light patrol telescope, 6 inch dia., 90 inch FL telescope, achromatic lens, no other optics except Schott OG5 & VG9 filter. Observes sunrise to 2400 UT. Rates: Normal = 1 picture every 10 minutes, Flare rate = 1 picture each 5 or 10 seconds. 35mm camera.
RAW DATA ---------- Film - original negatives
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Tables listing time of events and solar location
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Richard B. Dunn
Sacramento Peak Observatory
Sunspot NM
USA 88349

ADDRESS FOR INFORMATION ABOUT DATA -------- Lou B. Gilliam
Sacramento Peak Observatory
Sunspot NM
USA 88349

ADDITIONAL COMMENTS ----- Station operates in conjunction with H-alpha flare patrol. Special purpose data usually available after 1 month. Other investigators include: Dr. Jacques Beckers, Dr. R. Fischer, and Dr. W. Wagner (same address as above).

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reas, and Classifications (Cont.)

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SKALNATE PLESO
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ITEM: 558
DATE:20/03/75

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	N 49.19
STATION LONGITUDE	E 20.25
ALTERNATE NAMES	Astronomical Institute
DATES OF OPERATION	11/1943 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	20/304 cm C.Zeiss refractor. Drawings of sunspots, photographs of the whole disk, fine structure of the active regions in white light, fine structure of AR in H-alpha. Daily drawings of the sun, daily photographs of the disk in white light, according to activity and seeing detailed photographs of AR in white light and H-alpha (one picture per 3-5 minutes).
RAW DATA	Drawings, photographic plates, films
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Copies of drawings, photographic paper
DATA ROUTINELY PUBLISHED	Heliographic Maps of the Photosphere (Zurich)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Julius Sykora Astronomical Inst Skalnate Pleso The Slovak Academy of Science Tatranska Lomnica Czechoslovakia 05960
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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A01 Sunspot Positions,

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SUTHERLAND
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ITEM: 565
DATE:23/06/75

DISCIPLINE	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE	S 33.93
STATION LONGITUDE	E 18.48
ALTERNATE NAMES	Royal Obs, Cape of Good Hope South African Astronomical Obs
DATES OF OPERATION	1910 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Photoheliograph, two photographs in white light daily for obtaining areas of sunspots, positions and classification. The instrument is a De la Rue type photoheliograph made by Dallmeyer. The aperture of the object glass is 72mm. A secondary enlarging lens gives an image of the sun of about 20 cm diameter. Two fine grain blue sensitive plates are taken daily, weather permitting.
RAW DATA	Photographic plates (sent to Sussex for evaluation)
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Photoheliographic Results in tabular form
DATA ROUTINELY PUBLISHED	Royal Observatory Bulletins; Photoheliographic Results, available from the Royal Greenwich Obs or H. M. Stationery Office: Positions & area of sunspots, total areas & faculae for each day of the year.
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	The Director South African Astronomical Observato P.O. Box 9 Observatory Cape South Africa
ADDRESS FOR INFORMATION ABOUT DATA	The Director Royal Greenwich Observatory Herstmonceux Castle Hailsham Sussex United Kingdom
ADDITIONAL COMMENTS	

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TEHRAN
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ITEM: 1108
DATE:15/05/75

DISCIPLINE ----------	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ----------	N 35.70
STATION LONGITUDE ----------	E 51.47
ALTERNATE NAMES ----------	OL-D, 2 Weather Wing
DATES OF OPERATION ----------	12/1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow W-120 Optical Telescope (H-alpha); observatory operates daily from sunrise to sunset, takes 35 mm photos of the solar disk at a rate of 1 frame/min; monitors high frequency receivers for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 2 Weather Wing APO Box 1500 New York USA 09205
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ITEM: 644
DATE:12/02/76

DISCIPLINE ----------	A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ----------	N 50.80
STATION LONGITUDE ----------	E 4.35
ALTERNATE NAMES ----------	

New York
USA 09205

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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ITEM: 644
DATE:12/02/76 7c

DISCIPLINE ---------- A01 Sunspot Positions, Areas, and Classifications
STATION LATITUDE ---------- N 50.80
STATION LONGITUDE ---------- E 4.35
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1940 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Merz-Grubb Refractor and Zeiss heliograph on Equatorial Solar Table, sunspot pos/area/class, Merz-Grubb 160 mm Foc 2450 mm, solar 250 mm Heliograph Zeiss Tena AS 130/1950 9x12 plates.
RAW DATA ---------- Drawings 250 mm, 9x12 photographic plates
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER -------- 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer printouts
DATA ROUTINELY PUBLISHED ---------- OBSERVATIONS PHOTOSPHERIQUES 1-A, + Communications de lObs. Royal de Belgique, + Bulletin Astronomique Observ. Royal de Belgique
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. A. Koeckelenbergh
Observatoire Royal de Belgique, DRPS
Avenue Circulaire No. 3
Bruxelles
Belgium B1180

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data available after 1 month.

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A02 Su

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ATHENS
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ITEM: 1145
DATE:15/05/75

DISCIPLINE ----------	A02 Sunspot Numbers
STATION LATITUDE ----------	N 37.85
STATION LONGITUDE ----------	E 23.72
ALTERNATE NAMES ----------	OL-C, 2 Weather Wing
DATES OF OPERATION ----------	12/1965 to present Station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-250 Optical Telescope (H-alpha); AFGL Radio Telescopes, AFGL Polarimeter; observatory operates from sunrise to sunset daily, monitors four discrete radio frequencies (1415, 2695, 4995, and 8800 MHz); takes photos of the solar disk at a rate of 1 frame/min; monitors five high frequency receivers for detection of SWFs; monitors total electron content.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-C, 2 Weather Wing APO New York NY USA 09223
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data are at the National Observatory of Athens. The observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

98

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BOULDER
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ITEM: 920
DATE:18/02/75

DISCIPLINE ----------	A02 Sunspot Numbers
STATION LATITUDE ----------	N 39.98
STATION LONGITUDE ----------	E 254.72
ALTERNATE NAMES ----------	Boulder Observatory

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data are at the National Observatory of Athens. The observatory moved from the heart of Athens (nea the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

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BOULDER
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ITEM: 920
DATE:18/02/75 16

DISCIPLINE ---------- A02 Sunspot Numbers
STATION LATITUDE ---------- N 39.98
STATION LONGITUDE ---------- E 254.72
ALTERNATE NAMES ---------- Boulder Observatory
SOLTERWARN
DATES OF OPERATION ---------- 06/1965 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ White Light Telescope, daily sunspot drawings, original equipment (CRITERION) operated independently. In July 1967 CRITERION telescope piggybacked onto H-alpha telescope. Normal procedure sunspot drawing, coded reports
RAW DATA ---------- Sunspot drawings, coded reports
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Sunspot drawings, coded reports
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Space Environment Services Center
Space Environment Lab, ERL, NOAA
325 Broadway
Boulder CO
USA 80302

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Data are part of the US Operational Flare Patrol Network.

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spot Numbers

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BUCHAREST
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ITEM: 031
DATE:07/04/75

DISCIPLINE ---------- A02 Sunspot Numbers
STATION LATITUDE ---------- N 44.41
STATION LONGITUDE ---------- E 26.05
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ White Light Heliograph, Photographic observations of the photosphere with the heliograph (refractor 13/195 cm) and 9 cm solar image.
RAW DATA ---------- Film, photographic plates
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, film, photographic prints
DATA ROUTINELY PUBLISHED ---------- OBSERVATIONS SOLAIRES, SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Meudon; Zurich
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Calin Popovici
Astronomical Observatory
Cutitul de argint 5
Bucharest
Romania

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data available after 2 months.

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BUENOS AIRES
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ITEM: 75
DATE:24/02/76

DISCIPLINE ---------- A02 Sunspot Numbers
STATION LATITUDE ---------- S 34.55
STATION LONGITUDE ---------- E 301.27
ALTERNATE NAMES ---------- San Miguel
DATES OF OPERATION --------- 01/1940 to present

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data available after 2 months.

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BUENOS AIRES
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ITEM: 75
DATE:24/02/76

DISCIPLINE ---------- A02 Sunspot Numbers
STATION LATITUDE ---------- S 34.55
STATION LONGITUDE ---------- E 301.27
ALTERNATE NAMES ---------- San Miguel
DATES OF OPERATION ---------- 01/1940 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Equatorial Mounted Refractor, 18cm aperture, 2.5m focal distance, 2 frames during the day.
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- San Miguel
Observatorio Nacional de Fisica Cosmi
Av. Mitre 3100
San Miguel Buenos Aires
Argentina 1663

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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A02-2

A02 Suns

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CATANIA
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ITEM: 100
DATE:03/02/76

DISCIPLINE ----------
A02 Sunspot Numbers
STATION LATITUDE ---------- N 37.50
STATION LONGITUDE ---------- E 15.08
ALTERNATE NAMES ----------

DATES OF OPERATION ---------
04/1970 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Refractor 15 cm/223 cm
RAW DATA ----------
Drawings, tables, comp. printouts
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer printouts

DATA ROUTINELY PUBLISHED ---------- Pub. of Catania Astrophys. Obs.
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION -----
Prof. P. Maffei, Director
Osservatorio Astrofisico
Catania
Italy

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS ----- Special purpose data are usually available immediately.

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EBRO
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ITEM: 619
DATE:06/06/75

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS ----- Special purpose data are usually available immediately.

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EBRO

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ITEM: 619
DATE:06/06/75

DISCIPLINE ---------- A02 Sunspot Numbers
STATION LATITUDE ---------- N 40.82
STATION LONGITUDE ---------- E .49
ALTERNATE NAMES ---------- Tortosa
DATES OF OPERATION ---------- 01/1905 to present
Operation Intermittent
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Equatorial (visual, photographic) telescope, sunspot numbers, daily photograph and visual projection
RAW DATA ---------- Photographic plates
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1/30 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- No
DATA SENT TO WDC-B ---------- No
DATA SENT TO WDC-C ---------- Yes
Zurich-Daily Ursigram (USSPS) to Meud
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Observatorio del Ebro
Roquetas Tarragona
Spain

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Gap 1936-1939

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HAMBURG
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ITEM: 944
DATE: 22/05/75

DISCIPLINE ---------- A02 Sunspot Numbers
STATION LATITUDE ---------- N 53.64
STATION LONGITUDE ---------- E 9.96
ALTERNATE NAMES ---------- Planetarium Hamburg, Germany
Gesellsc Volkstumliche Astron
DATES OF OPERATION ---------- 06/1967 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Palomar f75/1200 mm Refractor: 40 day rotation cycle (ASTRONOMIE BEI TAGESLICHT), a new kind of sunspot statistics which make it impossible to count spots twice. Observations are made in a few groups of Amateur Astronomers in Germany and Greece with different kinds of instruments.
RAW DATA ---------- Drawings, lists
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 3 MONTHS
FORM OF REDUCED DATA ---------- List, graphical plots
DATA ROUTINELY PUBLISHED ---------- Quarterly bulletin GvA Sektion Sonne, Sternkieker GvA, Sterne und Weltraum Dusseldorf, Germany
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Andreas Saul
Gesellsc fur volkstumliche Astronomie e
Otzenstr. 12
Hamburg Fed Rep of Germany
Germany 2000 50

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Participants: Eugenides Foundation, M. Papthanassiou Athens, Greece; Olbers Gesellschaft Bremen Gremany; Volkssternwarte Darmstadt, Germany; Wilhelm Forster Sternwarte Berlin, Germany. Data regularly sent to VdS Berlin, Germany and Olbers Gesellschaft Bremen.

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A02 Sunsp

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HURBANOVO
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ITEM: 954
DATE:16/06/75

DISCIPLINE ---------- A02 Sunspot Numbers
STATION LATITUDE ---------- N 47.87
STATION LONGITUDE ---------- E 15.21
ALTERNATE NAMES ----------
Slovak Center/Amateur Astronomy

DATES OF OPERATION ---------- 09/1968 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- The photosphere is observed visually (sunspot drawings) and photographically by means of a Zeiss Coude refractor 150/2250 mm. Relative numbers are tabulated.

RAW DATA ---------- Drawings, photographic plates
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA, QUARTERLY BULLETIN ON SOLAR ACTIVITY

DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Meudon WDC-C

DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Bohuslav Lukac
The Slovak Center of Amateur Astronomy
Komarnanska x 65
Hurbanovo SSR
Czechoslovakia 947 01

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Co-investigator: Milan Belik. Observations were intermittent from 11/1972 to 12/1973.

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FAND###.#

ITEM: 957
DATE:23/06/75

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Co-investigator: Milan Belik. Observations were intermittent from 11/1972 to 12/1973.

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KANDILLI
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ITEM: 957
DATE:23/06/75

DISCIPLINE ---------- A02 Sunspot Numbers
STATION LATITUDE ---------- N 41.06
STATION LONGITUDE ---------- E 29.06
ALTERNATE NAMES ---------- Istanbul
DATES OF OPERATION ---------
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Solar observations
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Kandilli Observatory
Heliophysics Service
Cengelkoy
Istanbul
Turkey

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available immediately.

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KANZELHOEHE
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ITEM: 961
DATE:27/05/75

DISCIPLINE	A02 Sunspot Numbers
STATION LATITUDE	N 46.68
STATION LONGITUDE	E 13.91
ALTERNATE NAMES	Sonnenobs der Univ Graz
DATES OF OPERATION	05/1944 to present
	Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Patrol Telescope, 11/165 cm objective, solar image diameter 25 cm, projection drawings; sporadic photographs of interesting spot groups.
RAW DATA	Drawings, tables
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	URSIGRAM RWC-Darmstadt
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Zurich
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Sonnenobservatorium Kanzelhoehe Universitaet Graz Sattendorf Austria A-9520
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Gaps after 1955: 8/1966-1/1967 and 5/1967-4/1968.

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LUANDA
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ITEM: 362
DATE:26/02/75

DISCIPLINE	A02 Sunspot Numbers
STATION LATITUDE	S 8.79
STATION LONGITUDE	E 13.31
ALTERNATE NAMES	Mulemba Space Center
DATES OF OPERATION	16/09/1973 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Integral light heliograph, 3 mirror heliograph with heliostat tower, with possibility

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Gaps after 1955: 8/1966-1/1967 and 5/1967-4/1968.

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LUANDA

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ITEM: 362
DATE: 26/02/75

DISCIPLINE	A02 Sunspot Numbers
STATION LATITUDE	S 8.79
STATION LONGITUDE	E 13.31
ALTERNATE NAMES	Mulemba Space Center
DATES OF OPERATION	16/09/1973 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Integral light heliograph, 3 mirror heliograph with heliostat tower, with possibility of direct sun observation. Projection, photography and equipment for sunspots heliographic position determination. Future programmed installation of H filter.
RAW DATA	Photographic paper, drawings, graphs, lists
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Graphs, photographic paper, drawings, lists
DATA ROUTINELY PUBLISHED	At the end of each year included in the annual report to Angolas Government.
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Centro Espacial Da Mulembra C. P. 1366-C Luanda Angola West Africa
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data are on photographic paper and drawings when the size of sunspots justifies this; also graphs of Wolf numbers and lists of relative sunspot numbers from which are derived the monthly graphs. Special purpose data usually available after 1 month.

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A02 Su

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LUNPING
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ITEM: 994
DATE:17/06/75

DISCIPLINE	A02 Sunspot Numbers
STATION LATITUDE	N 25.00
STATION LONGITUDE	E 121.17
ALTERNATE NAMES	
DATES OF OPERATION	06/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Gote Telescope with coelostat system, by the method of projection to observed sunspots, one observation for each fine day.
RAW DATA	Drawings, film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Kyoto/Hailsham/Bombay/DeBilt/Gotti
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Y. N. Huang, Chief, Dept. Planning Telecommunication Laboratories, M. P.O. Box 71 Chung-Li Taiwan Republic of China 320
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MANILA
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ITEM: 995
DATE:22/05/75

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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MANILA
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ITEM: 995
DATE:22/05/75

DISCIPLINE ---------- A02 Sunspot Numbers
STATION LATITUDE ---------- N 14.65
STATION LONGITUDE ---------- E 121.07
ALTERNATE NAMES ----------
PAGASA Astronomical Obs
DATES OF OPERATION --------- 01/1957 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Refracting Telescope, 15 cm with 250 cm focal length, equatorially mounted. Solar image is projected onto an 8 inch circle and sunspots drawn and counted. Observation time is around 0000 UT daily.

RAW DATA ---------- Drawings
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tabular form
DATA ROUTINELY PUBLISHED ---------- BULLETIN OF ASTRONOMICAL OBSERVATIONS (PAGASA) annual
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Zurich
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Astronomical Observatory
Natl Geophysical & Astronomical Serv
PAGASA, P.O. Box 2277
Manila
Philippines

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Although a months data is reduced and available after 1 months time, it is not published separately. It will be contained in the annual Bulletin.

t Numbers (Cont.)

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PALEHUA
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ITEM: 1114
DATE:15/05/75

DISCIPLINE ----------	A02 Sunspot Numbers
STATION LATITUDE ----------	N 21.38
STATION LONGITUDE ----------	E 201.93
ALTERNATE NAMES ----------	OL-D, 1 Weather Wing
DATES OF OPERATION ----------	10/1969 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-120 optical telescope (H-alpha), AFGL radio telescopes; operate from sunrise to sunset daily. Monitors 2 discrete radio frequencies: 1415 and 8800 MHz. Take 35 mm photos of the solar disk at a rate of 1 frame/min. Monitors high frequency receivers for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 1 Weather Wing APO San Francisco USA 96553
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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PENTELI
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ITEM: 901
DATE:18/03/75

DISCIPLINE ----------	A02 Sunspot Numbers
STATION LATITUDE ----------	N 38.05
STATION LONGITUDE ----------	E 23.86

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PENTELI

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ITEM: 901

DATE:18/03/75

DISCIPLINE	A02 Sunspot Numbers
STATION LATITUDE	N 38.05
STATION LONGITUDE	E 23.86
ALTERNATE NAMES	Athens Natl Observatory of Athens
DATES OF OPERATION	05/1965 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Optical Telescope, White light observations, a 10 inch refractor for photographic observation (one picture per minute).
RAW DATA	Drawings
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Drawings
DATA ROUTINELY PUBLISHED	GEOPHYSICS AND SPACE DATA BULLETIN Space Physics Lab, AFGL
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Meudon, France
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Astronomical Institute National Observatory of Athens Athens Greece 306
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 0.5 months. Station moved 5/1973 from N37.97 E23.72.

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A02-4 1 90 A02-5

A02 Sunspot

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POTSDAM
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ITEM: 1137
DATE:22/08/76

DISCIPLINE ----------	A02 Sunspot Numbers
STATION LATITUDE ----------	N 52.38
STATION LONGITUDE ----------	E 13.07
ALTERNATE NAMES ----------	Sonnenobs Einsteinturm
DATES OF OPERATION ----------	1943 to present
OBSERVING SCHEDULE ----------	Occasional
INSTRUMENT DESCRIPTION -----	Solar tower telescope (f=1400cm, d=60cm) with grating spectrograph (f=1200cm, grating 15x15 cm-sq)
RAW DATA ----------	Film, analog paper records, computer printouts, drawings
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	6 MONTHS
FORM OF REDUCED DATA ----------	Tables, maps, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. Dr. F. W. Jager Zentralinst fur solar-terrestrische Phys Telegrafenberg Potsdam German Dem Rep DDR-15
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available after 6 months.

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PRESTON
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ITEM: 476
DATE:18/03/75

DISCIPLINE ---------- A02 Sunspot Numbers

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PRESTON

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ITEM: 476

DATE: 18/03/75

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DISCIPLINE	A02 Sunspot Numbers
STATION LATITUDE	N 53.81
STATION LONGITUDE	E 357.41
ALTERNATE NAMES	
	Wilfred Hall Obs
DATES OF OPERATION	06/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Sunspot drawings (8 inch refractor)
RAW DATA	Drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. V. Barocas Jeremiah Horrocks & Wilfred Hall Obs. Moor Park Preston Lancashire England PRI 6AD
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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Numbers (Cont.)

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SKALNATE PLESO
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ITEM: 1049
DATE:20/03/75

DISCIPLINE	A02 Sunspot Numbers
STATION LATITUDE	N 49.19
STATION LONGITUDE	E 20.25
ALTERNATE NAMES	Astronomical Institute
DATES OF OPERATION	11/1943 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	20/304 cm C. Zeiss refractor, drawings of sunspots, daily photographs of the disk in white light
RAW DATA	Drawings, photographic plates, film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Copies of drawings, photographic paper
DATA ROUTINELY PUBLISHED	HELIOGRAPHIC MAPS OF THE PHOTOSPHERE (Zurich)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Julius Sykora Astronomical Inst Skalnatm Pleso of the Slovak Academy of Sciences Tatranska Lomnica Czechoslovakia 05960
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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TEHRAN
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ITEM: 1109
DATE:15/05/75

DISCIPLINE	A02 Sunspot Numbers
STATION LATITUDE	N 35.70
STATION LONGITUDE	E 51.47
ALTERNATE NAMES	OL-D, 2 Weather Wing
DATES OF OPERATION	12/1968 to present
OBSERVING SCHEDULE	Regular

Astronomical Inst Skalnatm Pleso
of the Slovak Academy of Sciences
Tatranska Lomnica
Czechoslovakia 05960

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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TEHRAN
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ITEM: 1109
DATE:15/05/75

DISCIPLINE ---------- A02 Sunspot Numbers
STATION LATITUDE ---------- N 35.70
STATION LONGITUDE ---------- E 51.47
ALTERNATE NAMES ---------- OL-D, 2 Weather Wing
DATES OF OPERATION ---------- 12/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Razdow W-120 Optical Telescope (H-alpha); observatory operates daily from sunrise to sunset, takes 35 mm photos of the solar disk at a rate of 1 frame/min; monitors high frequency receivers for detection of SWFs.

RAW DATA ---------- Film, strip charts, drawings
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1/30 MONTHS
FORM OF REDUCED DATA ---------- Logs, chart rolls
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- OL-D, 2 Weather Wing
APO Box 1500
New York
USA 09205

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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A02 Sunsp

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TENERIFE
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ITEM: 598
DATE:13/03/75

DISCIPLINE	A02 Sunspot Numbers
STATION LATITUDE	N 28.48
STATION LONGITUDE	E 343.72
ALTERNATE NAMES	
DATES OF OPERATION	01/1970 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Razdow 250 Solar Telescope. Since 08/1972 40 cm Vacuum telescope in use. Probably beginning in 1976 both will be in use. Purpose is to obtain high resolution of sunspots in white light, and occasionally filtergrams in H-alpha. Not on a routine program, although trying to cover as many days as possible.
RAW DATA	35mm film (Scale 5.5 arcsec/mm)
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Instituto Universitario de Astrofisic Universidad de La Laguna La Laguna Tenerife Spain
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ITEM: 642
DATE:12/02/76 6a

DISCIPLINE	A02 Sunspot Numbers
STATION LATITUDE	N 50.80
STATION LONGITUDE	E 4.35
ALTERNATE NAMES	
DATES OF OPERATION	1940 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Merz Grubb Refractor ou Equatorial Solar Table 160 mm, foc 2450 mm, solar image 250 mm on projection sheet.
RAW DATA	Drawing, 9x12 plates from Zeiss heliograph
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	OBSERVATIONS PHOTOSPHERIQUES 1-A, + Communications de lObs. Royal de Belgique, + Bulletin Astronomique Observ. Royal de Belgique
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. Koeckelenbergh Observatoire Royal de Belgique, DRP Avenue Circulaire No. 3 Bruxelles Belgium B.1180
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	On the same equatorial table: Zeiss heliograph of 130 mm, 1950 mm foc, 9x12 plates, Scientia-Agfa Gevaert 10 E56. Special purpose data available after 1 month.

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A03 S

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IRKUTSK
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ITEM: 860
DATE:00/00/75

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DISCIPLINE ----------	A03 Solar Magnetic Fields
STATION LATITUDE ----------	N 52.47
STATION LONGITUDE ----------	E 104.03
ALTERNATE NAMES ----------	Zui
DATES OF OPERATION ----------	01/1964 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Solar magnetic fields in sunspots, daily visual measurements; also magnetic fields in active regions with a panoramic magnetograph.
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Drawings, maps
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. V. E. Stepanov SibIZMIR 664697 P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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KISLOVODSK

ITEM: 972
DATE:29/04/75

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ADDITIONAL COMMENTS -----

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KISLOVODSK

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ITEM: 972

DATE:29/04/75

DISCIPLINE ----------	A03 Solar Magnetic Fields
STATION LATITUDE ----------	N 44.70
STATION LONGITUDE ----------	E 42.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	06/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Coronagraphs with obj. 20 and 53 cm
RAW DATA ----------	Photos, tables, charts
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Tables, photos
DATA ROUTINELY PUBLISHED ----------	SOLAR DATA (Pulkovo Obs), Zurich Quarterly Solar Bulletin
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Kislovodsk Station of Pulkovo Obs P.O. Box 1 Kislovodsk USSR 357741
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above

ADDITIONAL COMMENTS -----

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ar Magnetic Fields

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KITT PEAK
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ITEM: 322
DATE:14/03/75

DISCIPLINE	A03 Solar Magnetic Fields
STATION LATITUDE	N 31.96
STATION LONGITUDE	E 248.40
ALTERNATE NAMES	
DATES OF OPERATION	02/1970 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Full disk solar photospheric magnetograms, a 512 channel Babcock type magnetograph, 1 arcsecond pixel, in Fe 8688A. Daily observations since Apr 1973 (previously monthly). On-line CRT gives immediate record which is transmitted by phone to NOAA SEL Forecast Center.
RAW DATA	Film, magnetic tape, computer printouts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Film (fixed pattern noise removed) magnetic tape, etc.
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	W. Livingston Kitt Peak National Observatory P.O. Box 26732 Tucson AZ USA 85726
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Co-investigator: J. Harvey. Special purpose data usually available immediately.

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A03 Solar Magnetic Fields (Cont.)

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MEUDON
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ITEM: 397
DATE:11/04/75

DISCIPLINE	A03 Solar Magnetic Fields
STATION LATITUDE	N 48.80
STATION LONGITUDE	E 2.25
ALTERNATE NAMES	
DATES OF OPERATION	06/1962 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Magnetographe du Grand Siderostat. Photographic measurements of magnetic field in active region (area 6 X 6 min in 5 min time) (resolution about 2 s) with 5250 and 5225 iron line. Vector magnetograph - Tachogram simultaneously with 5576 iron line. Reduction of films are made with Lambdameter (analog magnetic tape).
RAW DATA	
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Map of magnetic and Doppler Field, magnetic tape storage
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dept Astr Solaire et Planetaire (DASOP Observatoire de Meudon Place Jansen Meudon Hauts de Seine France 92190
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Observations are occasional since 1970. Special purpose data are usually available after 1 month.

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POTSDAM

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ITEM: 474
DATE: 09/09/75

DISCIPLINE	A03 Solar Magnetic Fields
STATION LATITUDE	N 52.38
STATION LONGITUDE	E 13.07
ALTERNATE NAMES	Sonnenobservatorium Einsteinturm Einsteinturm
DATES OF OPERATION	1946 to present Intermittent operation
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Measurements of solar magnetic fields. Tower telescope with grating spectrograph (f=1400 cm, d=60 cm) with spectrograph (f=1200 cm, grating 15 x15 cm sq) containing vector magnetograph for FeI 5253 A, device for photographic Zeeman spectrograms, Lyot-filter for H (pass-band 0.5 A).
RAW DATA	Analog paper drawings, photographic film
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, maps, graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Dr. F. W. Jager Zentralinst fur solar-terres Physik Telegrafenberg Potsdam German Dem Rep DDR-15
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 6 months.

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ITEM: 745

Potsdam
German Dem Rep DDR-15

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 6 months.

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ROME
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ITEM: 745
DATE:00/00/75

DISCIPLINE ---------- A03 Solar Magnetic Fields
STATION LATITUDE ---------- N 41.90
STATION LONGITUDE ---------- E 12.50
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Solar Magnetic Fields
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Bulletins
DATA ROUTINELY PUBLISHED ---------- SOLAR PHENOMENA, PHOTOGRAPHIC JOURNAL OF THE SUN (monthly)
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Massimo Cimino
Observatorio Astronomico di Roma
Via del Parco Mellini, 84
Rome
Italy 00136

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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A03 Solar Magnetic Fields (Cont.)

A03 Solar M

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SACRAMENTO PEAK
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ITEM: 501
DATE:23/06/75

DISCIPLINE	A03 Solar Magnetic Fields
STATION LATITUDE	N 32.78
STATION LONGITUDE	E 254.68
ALTERNATE NAMES	
DATES OF OPERATION	1967 to present
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Doppler-Zeeman Analyzer. Non-saturating double slit analyzer. Observing schedule is occasional, used mostly for active regions. Occasionally used for velocities.
RAW DATA	Digital magnetic tape, computer printouts, drawings
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Computer printouts, drawings, digital magnetic tape
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Richard B. Dunn Sacramento Peak Observatory Sunspot NM USA 88349
ADDRESS FOR INFORMATION ABOUT DATA	Lou B. Gilliam Sacramento Peak Observatory Sunspot NM USA 88349
ADDITIONAL COMMENTS	Special purpose data usually available after 1 month.

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ITEM: 573

ADDITIONAL COMMENTS ----- Special purpose data usually available after 1 month.

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STANFORD
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ITEM: 573
DATE:13/03/75

DISCIPLINE ---------- A03 Solar Magnetic Fields
STATION LATITUDE ---------- N 37.41
STATION LONGITUDE ---------- E 237.83
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1975 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Babcock Solar Magnetograph. Synoptic observations from sunrise to sunset.
RAW DATA ---------- Digital magnetic tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Magnetic tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- John M. Wilcox
Inst for Plasma Res, Stanford Univers
Via Crespi
Stanford CA
USA 94305

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data can be obtained in near real time.

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ar Magnetic Fields (Cont.)

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SYDNEY
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ITEM: 582
DATE:07/04/75

DISCIPLINE ----------	A03 Solar Magnetic Fields
STATION LATITUDE ----------	S 33.87
STATION LONGITUDE ----------	E 150.77
ALTERNATE NAMES ----------	Fleurs
DATES OF OPERATION ----------	01/1974 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	HF Field Strength Monitor. Crystal-controlled receivers, 4.9 and 7.5 MHz. Recording transmissions from Brisbane and Melbourne respectively. Chart speed 1 mm/minute.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Fleurs Field Station University of Sydney/IPS Kemps Creek N.S.W. Australia 2171
ADDRESS FOR INFORMATION ABOUT DATA --------	Disturbance Warning Section Ionospheric Prediction Service Dept. of Science, P.O. Box 702 Darlinghurst N.S.W. Australia 2010
ADDITIONAL COMMENTS -----	Data supplied to IUWDS network via URSIGRAM.

A04-1

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A04 H-Alpha Obs

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ARCETRI
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ITEM: 1079
DATE:23/08/76

DISCIPLINE ----------	A04 H-Alpha Observations (other than flares)
STATION LATITUDE ----------	N 43.75
STATION LONGITUDE ----------	E 11.25
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION -----	H-alpha/Spectroheliograph, Observing daily 0900-1100 UT for H-alpha and Calcium filtergrams; spectroheliograms: 1/day, if possible.
RAW DATA ----------	Film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Computer printouts
DATA ROUTINELY PUBLISHED ----------	Monthly Report
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Giuseppe Tagliaferri Osservatorio Astrofisico di Arcetri Largo E. Fermi, 5 Firenze Italy 50125
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ATHENS

ITEM: 1146
DATE:15/05/75

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servations (other than flares)

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BOULDER
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ITEM: 927
DATE: 18/02/75

DISCIPLINE	A04 H-Alpha Observations (other than flares)
STATION LATITUDE	N 39.98
STATION LONGITUDE	E 254.72
ALTERNATE NAMES	Boulder Observatory SOLTERWARN
DATES OF OPERATION	05/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	H-alpha Telescope (Razdow W120), eyepiece, TV monitor, 35 mm film, sunrise to sunset patrol. Daily photos and flare reports in real time to Forecast Center and IUWDS Network.
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	35 mm film, flare lists, coded reports
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Space Environment Services Center Space Environment Lab, ERL, NOAA 325 Broadway Boulder CO USA 80302
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of the US National Operational Flare Patrol Network. Data are available in real time to other Regional Warning Centers.

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ATHENS
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ITEM: 1146
DATE:15/05/75

DISCIPLINE ---------- A04 H-Alpha Observations (other than flares)
STATION LATITUDE ---------- N 37.85
STATION LONGITUDE ---------- E 23.72
ALTERNATE NAMES ---------- OL-C, 2 Weather Wing
DATES OF OPERATION ---------- 12/1965 to present
Station moved
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Razdow WS-250 Optical Telescope (H-alpha); AFGL Radio Telescopes, AFGL Polarimeter; observatory operates from sunrise to sunset daily, monitors four discrete radio frequencies (1415, 2695, 4995, and 8800 MHz); takes photos of the solar disk at a rate of 1 frame/min; monitors five high frequency receivers for detection of SWFs; monitors total electron content.

RAW DATA ---------- Film, strip charts, drawings
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1/30 MONTHS
FORM OF REDUCED DATA ---------- Logs, chart rolls
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- OL-C, 2 Weather Wing
APO
New York NY
USA 09223

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data are at the National Observatory of Athens. The observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

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Network. Data are available in real time to other Regional Warning Centers.

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BUCHAREST

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ITEM: 932

DATE:07/04/75

DISCIPLINE	A04 H-Alpha Observations (other than flares)
STATION LATITUDE	N 44.41
STATION LONGITUDE	E 26.05
ALTERNATE NAMES	
DATES OF OPERATION	1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	H-alpha Filter, photographic patrol of the chromosphere with 1/2A Hale Filter (refractor 10/150 cm) with 15 and 40 mm diameter image of the sun.
RAW DATA	Film, photographic plate
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, film, photographic prints
DATA ROUTINELY PUBLISHED	OBSERVATIONS SOLAIRES, SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Meudon; Zurich
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Calin Popovici Astronomical Observatory Cutitul de argint 5 Bucharest Romania
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 2 months.

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A04-2

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A04 H-Alpha Observati

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BUENOS AIRES
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ITEM: 76
DATE:24/02/76

DISCIPLINE	A04 H-alpha Observations (other than flares)
STATION LATITUDE	S 34.55
STATION LONGITUDE	E 301.27
ALTERNATE NAMES	San Miguel
DATES OF OPERATION	01/1968 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	H-alpha spectroheliograph, Gregory axis, 30 cm aperture in solar tower 12 m high. 3 frames during the day.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Photographic paper
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	San Miguel Observatorio Nacional de Fisica Cosmica San Miguel Buenos Aires Argentina 1663
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Some minor interruptions due to mechanical and electronic problems.

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CATANIA
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ITEM: 101
DATE:03/02/76

DISCIPLINE ---------- A04 H-alpha Observations (other than flares)
STATION LATITUDE ---------- N 37.50
STATION LONGITUDE ---------- E 15.08
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Refractors 15/180 and 15/200, H-alpha, Halle and Zeiss filters
RAW DATA ---------- Films, drawings, tables, computer printouts
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer printouts
DATA ROUTINELY PUBLISHED ---------- Publications of the Catania Astrophysics Observatory
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Meudon
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. G. Godoli
Observatorio Astrofisico
Catania
Italy

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose observations are usually available immediately.

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BBRO

ITEM: 620
DATE:06/06/75

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CAPRI F
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ITEM: 768
DATE: 00/00/75

DISCIPLINE ---------- A04 H-alpha Observations (other than flares)
STATION LATITUDE ---------- N 40.55
STATION LONGITUDE ---------- E 14.22
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ----- H-alpha 6563A spectroheliograph
RAW DATA ---------- 35 mm cinematographic film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Photographic negatives, prints, in black and white
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Anton Bruzek
Fraunhofer Institut
Schoeneckstrasse 6
Freiburg Breisgau
Fed Rep of German D 78

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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EBRO

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ITEM: 620

DATE:06/06/75

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DISCIPLINE ---------- A04 H-Alpha Observations (other than flares)

STATION LATITUDE ---------- N 40.82

STATION LONGITUDE ---------- E .49

ALTERNATE NAMES ---------- Tortosa

DATES OF OPERATION ---------- 01/1964 to present
Operation Intermittent

OBSERVING SCHEDULE ---------- Occasional

INSTRUMENT DESCRIPTION ------ Automatic monochromatic Lyot filter, chromospheric automatic cinematography, about two-three hours daily at a rate of speed of 1 photo every 3 minutes; every 11 photos, 1 overexposed for recording prominences

RAW DATA ---------- Photographic film

DATA REDUCTION PRACTICE ---------- None

REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS

FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ------ Observatorio del Ebro
Roquetas Tarragona
Spain

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above

ADDITIONAL COMMENTS ------ Ebro is operated occasionally - normally about 2 h every day from 1/1/1964 to 24/2/1967 and 19/6/1972 to 24/05/1974.

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A04-3

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A04 H-Alpha Obser

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HALEAKALA
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ITEM: 223
DATE:26/01/76

DISCIPLINE	A04 H-Alpha Observations (other than flares)
STATION LATITUDE	N 20.71
STATION LONGITUDE	E 203.74
ALTERNATE NAMES	
DATES OF OPERATION	1973 to present Intermittent operation
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	H-alpha Zeiss filter (1/4A) telescope to view selected regions. Used with a 10 inch coronagraph for large-scale photography of active regions with high resolution. Observations consist of wavelength scans through H-alpha plus or minus 4A. Programs are controlled by a PDP-8 computer and run only under good seeing conditions.
RAW DATA	Film
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Film, photographic prints
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Marie McCabe Institute for Astronomy 2680 Woodlawn Drive Honolulu HI USA 96822
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data are usually available after 1 month.

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ITEM: 053

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KANDILLI
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ITEM: 958
DATE:23/06/75

DISCIPLINE	A04 H-Alpha Observations (other than flares)
STATION LATITUDE	N 41.06
STATION LONGITUDE	E 29.06
ALTERNATE NAMES	Istanbul
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Solar observations, Lyot Filters
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Kandilli Observatory Heliophysics Service Cengelkoy Istanbul Turkey
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available immediately.

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KANZELHOEHE
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ITEM: 298
DATE:27/05/75

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data are usually available after 1 month.

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HURBANOVO
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ITEM: 953
DATE:16/06/75

DISCIPLINE ---------- A04 H-Alpha Observations (other than flares)
STATION LATITUDE ---------- N 47.87
STATION LONGITUDE ---------- E 15.21
ALTERNATE NAMES ----------
Slovak Center/Amateur Astronomy

DATES OF OPERATION ---------- 09/1968 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Spectrohelioscope for measurements of the H-alpha line width.
RAW DATA ---------- Photographic plate, film, strip chart, tables, drawings
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Meudon WDC
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Bohuslav Lukac
The Slovak Center of Amateur Astronomy
Komarnanska x 65
Hurbanovo SSR
Czechoslovakia 947 01

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Co-investigator: Milan Belik. Observations were intermittent from 11/1972 to 12/1973.

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KANZELHOEHE

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ITEM: 298

DATE: 27/05/75

DISCIPLINE	A04 H-alpha Observations (other than flares)
STATION LATITUDE	N 46.68
STATION LONGITUDE	E 13.91
ALTERNATE NAMES	Sonnenobs Kanzelhoehe Universitaet Graz
DATES OF OPERATION	05/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Patrol Telescope with 0.7A H-alpha filter, 10 cm diameter objective, 0.7A H-alpha filter (Lyot type), 15 mm image diameter changed to 22 mm in the future, 24x36 mm-sq film format, maximum 6 frames/min.
RAW DATA	Film
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, photographic prints
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Sonnenobservatorium Kanzelhoehe Universitaet Graz Sattendorf Austria A-9520
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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A04 H-Alpha Observa

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KISLOVODSK
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ITEM: 973
DATE:29/04/75

DISCIPLINE	A04 H-Alpha Observations (other than flares)
STATION LATITUDE	N 44.70
STATION LONGITUDE	E 42.50
ALTERNATE NAMES	
DATES OF OPERATION	06/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Photoheliograph 10 cm, spectroheliograph 25 cm, photographic observations
RAW DATA	Photos, tables, charts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, photos
DATA ROUTINELY PUBLISHED	SOLAR DATA (Pulkovo Obs) Zurich Quarterly Solar Bulletin
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Kislovodsk Station of Pulkovo Obs P.O. Box 1 Kislovodsk USSR 357741
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MANILA

ITEM: 384
DATE:10/05/75

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MANILA
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ITEM: 385
DATE:24/04/75

DISCIPLINE	A04 H-alpha Observations (other than flares)
STATION LATITUDE	N 14.64
STATION LONGITUDE	E 121.08
ALTERNATE NAMES	
DATES OF OPERATION	01/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Solar Optical Telescope with H-alpha filter, 10 inch aperture. H-alpha image of sun by visual, electro-optical and photographic (lapsed time). 35 mm photograph at 1 minute intervals from sunrise to sunset. Service part of U.S.A.F. First Weather Wing Solar Activity Patrol with other sites in Iran, Athens, Puerto Rico, Boulder and Hawaii.
RAW DATA	35mm film, records
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	Monthly Activity Report to First Weather Wing and associated stations.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Manila Observatory P.O. Box 1231 Manila Philippines D 404
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Auxiliary equipment - a) Vacuum spectroheliograph, b) white light camera

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MCMATH-HULBERT OBS/U. MICHIGAN

ITEM: 1074
DATE:27/03/75

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MANILA
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ITEM: 384
DATE:10/05/75

DISCIPLINE ----------	A04 H-alpha Observations (other than flares)
STATION LATITUDE ----------	N 14.64
STATION LONGITUDE ----------	E 121.08
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1963 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	H-alpha Vacuum Spectroheliograph--16 inch heliostat vertical projection with 3 inch (75 mm) image on entrance slit, 15 000 B and L replica grating, plane.
RAW DATA ----------	Photographs (negative)
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Photographic prints, tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	Manila Observatory P.O. Box 1231 Manila Philippines D 404
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS -----	

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Auxiliary equipment - a)Vacuum spectroheliograph, b)white light camera

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ITEM: 1074
DATE:27/03/75

MCMATH-HULBERT

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DISCIPLINE ----------	A04 H-alpha Observations (other than flares)
STATION LATITUDE ----------	N 42.66
STATION LONGITUDE ----------	E 276.74
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1932 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	High resolution solar spectrograph, Spectroheliograph, H-alpha Photoheliograph; solar activity plages (Ca II and H-alpha), solar flares, sunspots
RAW DATA ----------	Films, strip charts
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	McMath-Hulbert Observatory University of Michigan 895 N. Lake Angelus Road Pontiac MI USA 48055
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

A04-5

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A04 H-Alpha Observa

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MEUDON
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ITEM: 398
DATE:01/04/75

DISCIPLINE ---------- A04 H-alpha Observations (other than flares)
STATION LATITUDE ---------- N 48.80
STATION LONGITUDE ---------- E 2.23
ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 1920 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Spectroheliograph, H-alpha spectroheliograms, bandpass 0.25A, 1 photo/day, 89 mm
RAW DATA ---------- Photographic plates 13 X 18 cm.
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------- 4 MONTHS
FORM OF REDUCED DATA ---------- Synoptic charts
DATA ROUTINELY PUBLISHED ---------- CARTES SYNOPTIQUES DE LA CHROMOSPHERE, Paris Observatory
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Dept Astr Solaire et Planetaire (DASC
Observatoire de Meudon
Place Jules Jansen
Meudon Hauts de Seine
France 92190

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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ITEM: 399

ations (other than flares) (Cont.)

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PALEHUA

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ITEM: 1115
DATE:15/05/75

DISCIPLINE ----------	A04 H-Alpha Observations (other than flares)
STATION LATITUDE ----------	N 21.38
STATION LONGITUDE ----------	E 201.93
ALTERNATE NAMES ----------	OL-D, 1 Weather Wing
DATES OF OPERATION ----------	10/1969 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-120 optical telescope (H-alpha), AFGL radio telescopes; operate from sunrise to sunset daily. Monitors 2 discrete radio frequencies: 1415 and 8800 MHz. Take 35 mm photos of the solar disk at a rate of 1 frame/min. Monitors high frequency receivers for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 1 Weather Wing APO San Francisco USA 96553
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

ITEM: 902

ADDITIONAL COMMENTS

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MEUDON

ITEM: 399
DATE: 01/04/75

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DISCIPLINE	A04 H-alpha Observations (other than flares)
STATION LATITUDE	N 48.80
STATION LONGITUDE	E 2.23
ALTERNATE NAMES	
DATES OF OPERATION	1967 to present Intermittent operation
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Heliograph at variable wave length, images of the chromosphere in H-alpha, automatic instrument 1 image/min -- each observation takes 1 view at the center of H-alpha, 1 view at H-alpha - 0.7A, 1 view at H-alpha + 0.7A. Bandpass of Lyot filter 0.75A, observations made during periods of interesting activity on the sun.
RAW DATA	Photographic film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dept Astr Solaire et Planetaire (DAS Observatoire de Meudon Place Jules Jansen Meudon Hauts de Seine France 92190
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The instrument was removed to Sines (Portugal) in 1971 for a year.

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ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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PENTELI

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ITEM: 902
DATE: 18/03/75

DISCIPLINE ---------- A04 H-alpha Observations (other than flares)
STATION LATITUDE ---------- N 38.05
STATION LONGITUDE ---------- E 23.86
ALTERNATE NAMES ---------- Athens
Natl Observatory of Athens

DATES OF OPERATION ---------- 05/1965 to present
Station moved
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Razdow H-alpha Telescope, visual and photographic H-alpha patrol, a 10 inch refractor for the H-alpha patrol and photographic observation (one picture per minute).

RAW DATA ---------- Film, photographic paper
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 0.5 MONTHS
FORM OF REDUCED DATA ---------- Tables, films, photographic paper
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Meudon, France
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Astronomical Institute
National Observatory of Athens
Athens
Greece 306

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 0.5 months.
Station moved in 5/1973 from N37.97 E23.72.

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A04 H-Alpha Observa

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POTSDAM
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ITEM: 1138
DATE:22/08/76

DISCIPLINE ----------	A04 H-alpha Observations (other than flares)
STATION LATITUDE ----------	N 52.38
STATION LONGITUDE ----------	E 13.07
ALTERNATE NAMES ----------	Sonnenobs Einsteinturm
DATES OF OPERATION ----------	1958 to present
OBSERVING SCHEDULE ----------	Occasional
INSTRUMENT DESCRIPTION -----	Solar tower telescope (f=1400cm, d=60cm) with grating spectrograph (f=1200cm, grating 15x15 cm-sq), Lyot filter for H-alpha observations (bandpass 0.5A)
RAW DATA ----------	Film, analog paper records, computer printouts, drawings
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	6 MONTHS
FORM OF REDUCED DATA ----------	Tables, maps, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. Dr. F. W. Jager Zentralinst fur solar-terrestrische Ph Telegrafenberg Potsdam German Dem Rep DDR-15
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available after 6 months.

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RAMEY
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ITEM: 1121
DATE:06/03/75

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vations (other than flares) (Cont.)

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ROME
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ITEM: 744
DATE:00/00/75

DISCIPLINE ----------	A04 H-alpha Observations (other than flares)
STATION LATITUDE ----------	N 41.90
STATION LONGITUDE ----------	E 12.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	H-alpha Spectroheliograph, 6563A
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Bulletins
DATA ROUTINELY PUBLISHED ----------	SOLAR PHENOMENA, PHOTOGRAPHIC JOURNAL OF THE SUN (monthly)
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. Massimo Cimino Observatorio Astronomico di Roma Via del Parco Mellini, 84 Rome Italy 00136
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

Phys

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SACRAMENTO PEAK
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ITEM: 1126
DATE:13/06/75

DISCIPLINE ----------	A04 H-Alpha Observations (other than flares)
STATION LATITUDE ----------	N 32.78
STATION LONGITUDE ----------	E 254.68
ALTERNATE NAMES ----------	Sac Peak

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RAMEY

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ITEM: 1121
DATE:06/03/75

DISCIPLINE ---------- A04 H-Alpha Observations (other than flares)
STATION LATITUDE ---------- N 18.50
STATION LONGITUDE ---------- E 292.80
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 08/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- WS-250-1A Solar Optical Telescope System, H-alpha observations at 6563A with line shifting capability of + and - 1A
RAW DATA ---------- Film, photographic prints, forms, drawings
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- OL-D, 12 WSQ (MAC)
Box 261
FPO
New York
USA 09549

ADDRESS FOR INFORMATION ABOUT DATA -------- Natl Geophys & Solar-Terrest Data Cent
NOAA/EDS
Boulder CO
USA 80302

ADDITIONAL COMMENTS -----

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SACRAMENTO PEAK

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ITEM: 1126

DATE:13/06/75

DISCIPLINE ---------- A04 H-Alpha Observations (other than flares)

STATION LATITUDE ---------- N 32.78

STATION LONGITUDE ---------- E 254.68

ALTERNATE NAMES ---------- Sac Peak

DATES OF OPERATION ---------- 1958 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- 1)Big Dome Spectroheliograph: double pass monochrometer, 4 inch solar image, daily D3, H-alpha, CaK spectroheliograms; occasionally schedule continues observations when activity level is high. 2)30cm coelostat telescope, 4inch achromatic image, feeds spectroheliograph, Littrow spectrograph and East Bench Dual Camera. 3)40cm coronagraph (began operating 1964) feeds East Bench Dual Camera, Spectroheliograph, Littrow spectrograph, coronal emission line photometer and Universal spectrograph.

RAW DATA ---------- 4 inch solar image on film

DATA REDUCTION PRACTICE ---------- None

REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS

FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Richard B. Dunn
Sacramento Peak Observatory
Sunspot NM
USA 88349

ADDRESS FOR INFORMATION ABOUT DATA -------- Lou B. Gilliam
Sacramento Peak Observatory
Sunspot NM
USA 88349

ADDITIONAL COMMENTS ----- CaK pictures sent daily to NOAA SEL Forecast center in Boulder, CO.

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A04-7

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101

A04 H-Alpha Observa

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SKALNATE PLESO
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ITEM: 1050
DATE:20/03/75

DISCIPLINE ----------	A04 H-Alpha Observations (other than flares)
STATION LATITUDE ----------	N 49.19
STATION LONGITUDE ----------	E 20.25
ALTERNATE NAMES ----------	Astronomical Institute
DATES OF OPERATION ----------	11/1943 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	20/304 cm C. Zeiss refractor, fine structure of active regions in H-alpha, detailed photography (one picture per 3-5 minutes)
RAW DATA ----------	Drawings, photographic plates films
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Copies of drawings, photographic paper
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Julius Sykora Astronomical Inst Skalnate Pleso of the Slovak Academy of Sciences Tatranska Lomnica Czechoslovakia 05960
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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TEHRAN

ITEM: 1110
DATE:15/05/75

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TOKYO
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ITEM: 611
DATE:14/04/75

DISCIPLINE	A04 H-Alpha Observations (other than flares)
STATION LATITUDE	N 35.67
STATION LONGITUDE	E 139.54
ALTERNATE NAMES	
DATES OF OPERATION	01/1949 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Monochromatic Heliograph, H-Alpha Observations of the sun, Continuous photographing of the sun in the H-Alpha light.
RAW DATA	Films
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	Monthly Bulletin on Solar Phenomena, Tokyo Astronomical Observatory
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Meudon
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Fumio Moriyama Tokyo Astronomical Observatory Osawa 2-21-1, Mitaka Tokyo Japan 181
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Auxiliary equipment: H-Alpha line profile recorder.

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UECHT
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ITEM: 645
DATE:17/04/75

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TEHRAN

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ITEM: 1110
DATE:15/05/75

DISCIPLINE ----------	A04 H-Alpha Observations (other than flares)
STATION LATITUDE ----------	N 35.70
STATION LONGITUDE ----------	E 51.47
ALTERNATE NAMES ----------	OL-D, 2 Weather Wing
DATES OF OPERATION ----------	12/1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow W-120 Optical Telescope (H-alpha); obser vatory operates daily from sunrise to sunset, takes 35 mm photos of the solar disk at a rate of 1 frame/min: monitors high freguency receive for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 2 Weather Wing APO Box 1500 New York USA 09205
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ----- Auxiliary equipment: H-Alpha line profile recorder.

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UECHT
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ITEM: 645
DATE:17/04/75

DISCIPLINE ---------- A04 H-Alpha Observations (other than flares)
STATION LATITUDE ---------- N 46.85
STATION LONGITUDE ---------- E 7.27
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 05/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Cl 8 inch Coude refractor, Birefringent filter centered on H-Alpha 0.5A BW, f=2.35m, records on 35 mm film. Pictures are taken automatically every 2 min, during flares every 20 s.
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------- 2 MONTHS
FORM OF REDUCED DATA ---------- Film
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Mr. F. Stocker
Institute of Applied Physics
Sidlerstr 5
Bern
Switzerland CH-3000

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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A05-1

A05

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CATANIA
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ITEM: 96
DATE:03/02/76

DISCIPLINE ----------	A05 Calcium Plages
STATION LATITUDE ----------	N 37.50
STATION LONGITUDE ----------	E 15.08
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1970 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Spectroheliograph
RAW DATA ----------	Photographic plates, drawings, tables, computer printouts
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Tables, computer printouts
DATA ROUTINELY PUBLISHED ----------	Publication of the Catania Astrophys. Observatory
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes Freiburg
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. P. Maffei, Director Osservatorio Astrofisico Catania Italy
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data are usually available immediately.

102

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KANDILLI
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ITEM: 959
DATE:23/06/75

DISCIPLINE ---------- A05 Calcium Plages

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5 Calcium Plages

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KISLOVODSK
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ITEM: 974
DATE:29/04/75

DISCIPLINE ----------	A05 Calcium Plages
STATION LATITUDE ----------	N 44.70
STATION LONGITUDE ----------	E 42.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	06/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Photoheliograph 10 cm, spectroheliograph 25 cm, photographic observations
RAW DATA ----------	Photos, tables, charts
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Tables, photos
DATA ROUTINELY PUBLISHED ----------	SOLAR DATA (Pulkovo Obs) Zurich Quarterly Solar Bulletin
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	Kislovodsk Station of Pulkovo Ob P.O. Box 1 Kislovodsk USSR 357741
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS -----	

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MANILA
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ITEM: 996
DATE:18/05/75

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KANDILLI
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ITEM: 959
DATE:23/06/75

DISCIPLINE	A05 Calcium Plages
STATION LATITUDE	N 41.06
STATION LONGITUDE	E 29.06
ALTERNATE NAMES	Istanbul
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Solar Observations
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Kandilli Observatory Cengelkoy Istanbul Turkey
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available immediately.

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MANILA

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ITEM: 996
DATE:18/05/75

DISCIPLINE	A05 Calcium Plages
STATION LATITUDE	N 14.64
STATION LONGITUDE	E 121.08
ALTERNATE NAMES	
DATES OF OPERATION	01/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Vacuum Spectroheliograph, H-alpha and Ca II (K), 16 inch heliostat vertical projection with 3 inch (75 mm) image on entrance slit, 15 000 B and L replica grating, plane.
RAW DATA	Photographs (negatives)
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Photographic prints, tables
DATA ROUTINELY PUBLISHED	PHOTOGRAPHIC MAP OF THE SUN in Calcium (monthly), PHOTOGRAPHIC JOURNAL OF SUN (Rome)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Manila Observatory P.O. Box 1231 Manila Philippines D 404
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Also available: 10 inch refraction with Halle-Lyot filter and 4 inch Unitron for white light photos. Special purpose data available immediately. Tabular data are sent to WDC-A and USAF Weather Wing.

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A05-2 L03

A05 Calci

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MCMATH-HULBERT
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ITEM: 1075
DATE:27/03/75

DISCIPLINE ---------- A05 Calcium Plages
STATION LATITUDE ---------- N 42.66
STATION LONGITUDE ---------- E 276.74
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1932 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- High resolution solar spectograph, Spectroheliograph, H-alpha Photoheliograph; solar activity plages (Ca II and H-alpha), solar flares, sunspots

RAW DATA ---------- Films, strip charts
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- McMath-Hulbert Observatory
University of Michigan
895 N. Lake Angelus Road
Pontiac MI
USA 48055

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS -----

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MEUDON

ITEM: 1004
DATE:01/04/75

lcium Plages (Cont.)

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PENTELI
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ITEM: 903
DATE:18/03/75

DISCIPLINE	A05 Calcium Plages
STATION LATITUDE	N 38.05
STATION LONGITUDE	E 23.86
ALTERNATE NAMES	Athens Natl Observatory of Athens
DATES OF OPERATION	05/1965 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Optical Telescope, visual and photographic observations
RAW DATA	
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Tables, films, photographic paper
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Meudon, France
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Astronomical Institute National Observatory of Athens Athens Greece 306
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 0.5 months. Station moved in 5/1973 from N37.97 E23.72.

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ROME

ITEM: 742
DATE:00/00/75

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MEUDON
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ITEM: 1004
DATE:01/04/75

DISCIPLINE ---------- A05 Calcium Plages
STATION LATITUDE ---------- N 48.80
STATION LONGITUDE ---------- E 2.23
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1920 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Spectroheliograph, Ca K spectroheliograms taken at center of the bandpass 0.15A, 1 photo/day, 87 mm phi, and at K plus or minus 1.25A from line center (K1V), 1 photo/day, 87 mm phi.

RAW DATA ---------- Photographic plates 13x18 cm
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 4 MONTHS
FORM OF REDUCED DATA ---------- Cartes Synoptiques
DATA ROUTINELY PUBLISHED ---------- CARTES SYNOPTIQUES DE LA CHROMOSPHERE (Paris Observatory)

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dept dAstronomie Solaire et Planetai
Observatoire de Meudon, DASOP
Place Jules Jansen
Meudon Hauts de Seine
France 92190

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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ROME
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ITEM: 742
DATE: 00/00/75

DISCIPLINE ---------- A05 Calcium Plages
STATION LATITUDE ---------- N 41.90
STATION LONGITUDE ---------- E 12.50
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Calcium Plages, 3934A
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Bulletins
DATA ROUTINELY PUBLISHED ---------- SOLAR PHENOMENA, PHOTOGRAPHIC JOURNAL OF THE SUN (monthly)
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Massimo Cimino
Observatorio Astronomico di Roma
Via del Parco Mellini, 84
Rome
Italy 00136

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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A05 3

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A05 Calcium Plages (Cont.)

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SACRAMENTO PEAK
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ITEM: 1127
DATE:13/06/75 3a

DISCIPLINE ----------	A05 Calcium Plages
STATION LATITUDE ----------	N 32.78
STATION LONGITUDE ----------	E 254.68
ALTERNATE NAMES ----------	Sac Peak
DATES OF OPERATION ----------	1958 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	1)Big Dome Spectroheliograph, double pass monochrometer, 4 inch solar image recorded on film. Normal schedule is daily D3, H-alpha, CaK spectroheliograms, occasionally schedule continues observations when activity level is high. 2)30cm coelostat telescope, 4inch achromatic image, feeds spectroheliograph, Littrow spectrograph and East Bench Dual Camera. 3)40cm coronagraph (began operating 1964), feeds East Bench Dual Camera, Spectroheliograph, Littrow spectrograph, (see below). 4)East Bench Dual Camera (began operating 4/1964) (see below)
RAW DATA ----------	4 inch solar image on film
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Richard B. Dunn Sacramento Peak Observatory Sunspot NM USA 88349
ADDRESS FOR INFORMATION ABOUT DATA --------	Lou B. Gilliam Sacramento Peak Observatory Sunspot NM USA 38349
ADDITIONAL COMMENTS -----	CaK pictures sent daily to NOAA SEL Forecast Center in Boulder, CO. 3)40cm coronagraph also feeds coronal emission line photometer and Universal spectrograph. 4)East Bench Dual Camera, 10 inch image, recorded on 35mm film, simultaneous H-alpha and CaK pictures or CaK and white light, occasionally scheduled.

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A06 Solar Maps,

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ATHENS
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ITEM: 1147
DATE:15/05/75

DISCIPLINE ----------	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ----------	N 37.85
STATION LONGITUDE ----------	E 23.72
ALTERNATE NAMES ----------	OL-C, 2 Weather Wing
DATES OF OPERATION ----------	12/1965 to present Station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-250 Optical Telescope (H-alpha); AFGL Radio Telescopes, AFGL Polarimeter; observatory operates from sunrise to sunset daily, monitors four discrete radio frequencies (1415, 2695, 4995, and 8800 MHz); takes photos of the solar disk at a rate of 1 frame/min; monitors five high frequency receivers for detection of SWFs; monitors total electron content.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-C, 2 Weather Wing APO New York NY USA 09223
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data are at the National Observatory of Athens. The observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

aps, Prominences, Filaments

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BOULDER
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ITEM: 928
DATE:18/02/75

DISCIPLINE ---------- A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ---------- N 39.98
STATION LONGITUDE ---------- E 254.72
ALTERNATE NAMES ---------- Boulder Observatory
SOLTERWARN
DATES OF OPERATION ---------- 05/1967 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ H-alpha Telescope (Razdow W120), eyepiece, TV monitor, 35 mm film, sunrise to sunset patrol. Daily photos and flare reports in real time to Forecast Center and IUWDS Network.
RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- 35 mm film
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Space Environment Services Center
Space Environment Lab, ERL, NOAA
325 Broadway
Boulder CO
USA 80302

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------ Part of the US National Operational Flare Patrol Network. Data are available in real time to other Regional Warning Centers.

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CAPRI F
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ITEM: 770
DATE:00/00/75

DISCIPLINE ---------- A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ---------- N 40.55
STATION LONGITUDE ---------- E 14.22
ALTERNATE NAMES ----------
DATES OF OPERATION ----------

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ------ Part of the US National Operational Flare Patrol Network. Data are available in real time to other Regional Warning Centers.

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CAPRI F

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ITEM: 770
DATE: 00/00/75

DISCIPLINE ---------- A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ---------- N 40.55
STATION LONGITUDE ---------- E 14.22
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ DAILY MAPS of Fraunhofer Institute
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Anton Bruzek
Fraunhofer Institut
Schoeneckstrasse 6
Freiburg Breisgau
Fed Rep of Germany D 78

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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A06-2

A06 Solar Ma

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CATANIA
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ITEM: 935
DATE: 03/02/76

DISCIPLINE	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE	N 37.50
STATION LONGITUDE	E 15.08
ALTERNATE NAMES	
DATES OF OPERATION	04/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	H-alpha/Halle and Zeiss Filters, refractors 15/180 and 15/200.
RAW DATA	Film, drawings, tables, compu printouts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	Publication of the Catania As physical Observatory
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Meudon
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. G. Godoli Osservatorio Astrofisico Catania Italy
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available immediately.

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HALEAKALA

ITEM: 224
DATE: 26/01/76

Prominences, Filaments (Cont.)

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HURBANOVO
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ITEM: 955
DATE:16/06/75

DISCIPLINE	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE	N 47.87
STATION LONGITUDE	E 15.21
ALTERNATE NAMES	Slovak Center/Amateur Astronomy
DATES OF OPERATION	09/1968 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	The photosphere is observed visually (facules) and photographically by means of a Zeiss Coude revractor 150/2250 mm. Relative numbers are tabulated.
RAW DATA	Photographic plate, film, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Meudon
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Bohuslav Lukac The Slovak Center fo Amateur Astron Komarnanska x 65 Hurbanovo SSR Czechoslovakia 947 01
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Co-investigator: Milan Belik. Observations were intermittent from 11/1972 to 12/1973.

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KISLOVODSK
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ITEM: 975
DATE:29/04/75

DISCIPLINE	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE	N 44.70
STATION LONGITUDE	E 42.50
ALTERNATE NAMES	

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HALEAKALA

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ITEM: 224

DATE:26/01/76

DISCIPLINE ---------- A06 Solar Maps, Prominences, Filaments

STATION LATITUDE ---------- N 20.71

STATION LONGITUDE ---------- E 203.74

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 1969 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- H-alpha coronagraph for prominence observations. 4 inch coronagraph with 7.5A bandpass (FWHM) H-alpha interference filter. Sequences of 4 exposures are taken at intervals of 1 min to 1 h or on a daily basis only when activity is low.

RAW DATA ---------- Film

DATA REDUCTION PRACTICE ---------- None

REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS

FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Marie McCabe
Institute for Astronomy
2680 Woodlawn Drive
Honolulu HI
USA 96822

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS -----

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ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Co-investigator: Milan Belik. Observations were intermittent from 11/1972 to 12/1973.

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KISLOVODSK
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ITEM: 975
DATE:29/04/75

DISCIPLINE ---------- A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ---------- N 44.70
STATION LONGITUDE ---------- E 42.50
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 06/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Photoheliograph 10 cm, spectroheliograph 25 cm, photographic observations
RAW DATA ---------- Photos, tables, charts
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Tables, photos
DATA ROUTINELY PUBLISHED ---------- SOLAR DATA (Pulkovo Obs)
Zurich Quarterly Solar Bulletin
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Kislovodsk Station of Puldovo Obs
P.O. Box 1
Kislovodsk
USSR 357741

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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107

A06 3

A06 Solar Maps, Pr

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KITT PEAK
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ITEM: 979
DATE:14/03/75

DISCIPLINE ---------- A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ---------- N 31.96
STATION LONGITUDE ---------- E 248.40
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 02/1970 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Full Disk He 10830A maps taken on a second priority basis with magnetograms, 60 cm vacuum telescope. Velocity maps occasionally taken.
RAW DATA ---------- Film, magnetic tape, computer printouts
DATA REDUCTION PRACTICE ---------- Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------- 1 MONTHS
FORM OF REDUCED DATA ---------- Film, magnetic tape, etc.
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ W. Livingston
Kitt Peak National Observatory
P.O. Box 26732
Tucson AZ
USA 85726

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ------ Co-investigator: J. Harvey (same address). Special purpose data available immediately. Observations were made monthly from 02/1970, made daily since 04/1973.

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LOMNICKY STIT
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ITEM: 353
DATE:20/03/75

DISCIPLINE ---------- A06 Solar Maps, Prominences, Filaments

Prominences, Filaments (Cont.)

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MANILA
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ITEM: 997
DATE: 18/05/75

DISCIPLINE	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE	N 14.64
STATION LONGITUDE	E 121.08
ALTERNATE NAMES	
DATES OF OPERATION	01/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Vacuum Spectroheliograph, H-alpha and Ca II(K), 16 inch heliostat vertical projection with 3 inch (75 mm) image on entrance slit, 15 000 B and L replica grating, plane.
RAW DATA	Photographs (negatives)
DATA REDUCTION PRACTICE	*Regular* , *Special*
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Photographic prints, tables
DATA ROUTINELY PUBLISHED	PHOTOGRAPHIC MAP OF THE SUN in Calcium (monthly), PHOTOGRAPHIC JOURNAL OF SUN (Rome)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Manila Observatory P.O. Box 1231 Manila Philippines D 404
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Also available: 10 inch refraction with Halle-Lyot filter and 4 inch Unitron for white light photos. Special purpose data available immediately. Tabular data are sent to WDC-A and USAF Weather Wing.

purpose data available immediately. Observations were made monthly from 02/1970, made daily since 04/1973.

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LOMNICKY STIT
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ITEM: 353
DATE: 20/03/75

DISCIPLINE	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE	N 49.18
STATION LONGITUDE	E 20.22
ALTERNATE NAMES	Skalnate Pleso
DATES OF OPERATION	07/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	20/300 cm Zeiss coronograph (two pieces). Photographically--prominences in H-alpha, spectrum of prominences, the emission coronal lines in a range 4000-8000 A (image of the corona in 5303 A, polarization of the corona in 5303 A, planned in 1975).In active regions more observations during day according to the special program are made.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, photographic paper
DATA ROUTINELY PUBLISHED	SOLNECHNYE DANNYE (USSR)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Vojtech Rusin Astronomical Institute Slalnate P Slovak Acad of Sci, Obs Lomnicky Tatranska Lomni Czechoslovakia 059 60
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Co-investigator Milan Rybansky

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108

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A06 Solar Maps, P

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MAUNA LOA
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ITEM: 1003
DATE:20/02/75

DISCIPLINE	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE	N 19.53
STATION LONGITUDE	E 155.58
ALTERNATE NAMES	
DATES OF OPERATION	12/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	K-Coronameter, Coronal Activity Monitor, Prominence Coronagraph; The K-Coronameter and Coronal Activity Monitor are optical Polarimeters attached to coronagraphs to permit measurement of the intensity of solar white light (K) corona. The Prominence Coronagraph employs a 10A filter centered at H-alpha for photography of solar prominences from the solar limb to a height of 2R from center of the sun. Daily observations often from an hour after sunrise til an hour before sunset.
RAW DATA	Paper charts, magnetic tape, 70 mm film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Magnetic tape, film, photos, plots microfilm, computer printouts, etc
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Richard T. Hansen High Altitude Observatory of NCAR P.O. Box 3000 Boulder CO USA 80303
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data are assembled at HAO. K-Coronal data originally in form of paper charts which are then digitized and transferred to magnetic tape. Prominence photographs on 70 mm film. More information is available from WDC-A or the investigators.

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M: 1003
E:20/02/75

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MEUDON
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DISCIPLINE	A06 Solar Maps, Prominences, Fil
STATION LATITUDE	N 48.80
STATION LONGITUDE	E 2.23
ALTERNATE NAMES	
DATES OF OPERATION	1920 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Spectroheliograph, H-alpha and C grams, 1) H-alpha bandpass 0.25A 89 mm phi, 2) K center bandpass 87 mm phi, 3) K plus or minus 1. center (K1V), 1 photo/day, 87 mm
RAW DATA	Photographic plat
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	4 MONTHS
FORM OF REDUCED DATA	Cartes Synoptique
DATA ROUTINELY PUBLISHED	CARTES SYNOPTIQUE SPHERE (Paris Obs
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dept dAstronomie Observatoire de M Place Jules Janse Meudon Ha France
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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PALEHUA
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DISCIPLINE	A06 Solar Maps, Prominences, Fila
STATION LATITUDE	N 21.38
STATION LONGITUDE	E 201.93
ALTERNATE NAMES	OL-D, 1 Weather Wing
DATES OF OPERATION	10/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Razdow WS-120 optical telescope radio telescopes; operate from su daily. Monitors 2 discrete radio 1415 and 8800 MHz. Take 35 mm p solar disk at a rate of 1 frame/ high frequency receivers for de

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ITEM: 1005
DATE:01/04/75

A06 Solar Maps, Prominences, Filaments
N 48.80
E 2.23

1920 to present
Regular
Spectroheliograph, H-alpha and Ca K spectroheliograms, 1) H-alpha bandpass 0.25A, 1 photo/day, 89 mm phi, 2) K center bandpass 0.15A, 1 photo/day 87 mm phi, 3) K plus or minus 1.25A, 1.25A from center (K1V), 1 photo/day, 87 mm phi.
---------- Photographic plates 13x18 cm
---------- Regular
AFTER ------ 4 MONTHS
---------- Cartes Synoptiques
---------- CARTES SYNOPTIQUES DE LA CHROMOSPHERE (Paris Observatory)

---------- Yes
TATION ----- Dept dAstronomie Solaire et Planetaire
Observatoire de Meudon, DASOP
Place Jules Jansen
Meudon Hauts de Seine
France 92190

ATA -------- Same as above

ITEM: 1116
DATE:15/05/75

A06 Solar Maps, Prominences, Filaments
N 21.38
E 201.93
OL-D, 1 Weather Wing
10/1969 to present
Regular
Razdow WS-120 optical telescope (H-alpha), AFGL radio telescopes; operate from sunrise to sunset daily. Monitors 2 discrete radio frequencies: 1415 and 8800 MHz. Take 35 mm photos of the solar disk at a rate of 1 frame/min. Monitors high frequency receivers for detection of SWFs.
---------- Film, strip charts, drawings
---------- Regular

France 92190

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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ITEM: 1116
PALEHUA
DATE:15/05/75 4a

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DISCIPLINE ----------	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ----------	N 21.38
STATION LONGITUDE ----------	E 201.93
ALTERNATE NAMES ----------	OL-D, 1 Weather Wing
DATES OF OPERATION ----------	10/1969 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-120 optical telescope (H-alpha), AFGL radio telescopes; operate from sunrise to sunset daily. Monitors 2 discrete radio frequencies: 1415 and 8800 MHz. Take 35 mm photos of the solar disk at a rate of 1 frame/min. Monitors high frequency receivers for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 1 Weather Wing APO San Francisco USA 96553
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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A06-S

A06 Solar Maps, P

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PENTELI
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ITEM: 904
DATE:18/03/75

DISCIPLINE ----------	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ----------	N 38.05
STATION LONGITUDE ----------	E 23.86
ALTERNATE NAMES ----------	Natl Observatory of Athens Athens
DATES OF OPERATION ----------	05/1965 to present Station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Razdow H-alpha telescope, visual and photographic observations with a 10 inch refractor (one picture per minute).
RAW DATA ----------	Film, photographic paper
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER -------	0.5 MONTHS
FORM OF REDUCED DATA ----------	Tables, films, photographic paper
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes Meudon, France
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Astronomical Institute National Observatory of Athens Athens Greece 306
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	Special purpose data available after 0.5 months. Station moved 5/1973 from N37.97 E23.72.

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POTSDAM
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ITEM: 1139
DATE:22/08/76

Prominences, Filaments (Cont.)

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RAMEY
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ITEM: 1123
DATE:15/05/75

DISCIPLINE ----------	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ----------	N 18.52
STATION LONGITUDE ----------	E 292.90
ALTERNATE NAMES ----------	OL D, 12 Weather Squadron
DATES OF OPERATION ----------	08/1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow Optical H-Alpha Telescope WS-250; observatory operates daily from 1/2 hour before sunrise to 1/2 hour after sunset; 35 mm photo of s one frame per minute; 4 inch unitron white light photographs for sunspot drawings
RAW DATA ----------	Film, drawings, logs
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Film, photographic prints, graphical plots
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	OL D, 12 Weather Squadron Box 261 FPO New York USA 09549
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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POTSDAM

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ITEM: 1139
DATE:22/08/76

DISCIPLINE ----------	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ----------	N 52.38
STATION LONGITUDE ----------	E 13.07
ALTERNATE NAMES ----------	Sonnenobs. Einsteinturm
DATES OF OPERATION ----------	1955 to present
OBSERVING SCHEDULE ----------	Occasional
INSTRUMENT DESCRIPTION -----	Solar tower telescope (f=1400cm, d=60cm) with grating spectrograph (f=1200cm, grating 15x15 cm-sq), containing vector magnetograph for FeI 5253A, device for photographic Zeeman spectrograms, Lyot filter for H-alpha (bandpass 0.5A).
RAW DATA ----------	Film, analog paper records, computer printouts, drawings
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	6 MONTHS
FORM OF REDUCED DATA ----------	Tables, maps, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. Dr. F. W. Jager Zentralinst fur solar-terrestrische Ph Telegrafenberg Potsdam German Dem Rep DDR-15
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available after 6 months.

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A06 Solar Maps, F

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SACRAMENTO PEAK
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ITEM: 1128
DATE:13/06/75

DISCIPLINE ----------	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE ----------	N 32.78
STATION LONGITUDE ----------	E 254.68
ALTERNATE NAMES ----------	Sac Peak
DATES OF OPERATION ----------	1955 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	1)Littrow Spectrograph, spectrum & slit jaw pictures; 13 m focal length, single or double pass, occasionally scheduled, photographic or photoelectric output. 2)40cm coronagraph (began operation 1964) feeds East Bench Dual Camera, Spectroheliograph, Littrow spectrograph, coronal emission line photometer and Universal spectrograph. 3)East Bench Dual Camera (began operating 4/1964) 10 inch image, recorded on 35mm film, simultaneous H-alpha and CaK pictures or H-alpha and white light or CaK & white light, occasional.
RAW DATA ----------	35 or 70 mm film, magnetic tape, analog charts
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Film, magnetic tape, computer printout (depends on observation)
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Richard B. Dunn, Director Sacramento Peak Observatory Sunspot NM USA 88349
ADDRESS FOR INFORMATION ABOUT DATA --------	Lou B. Gilliam Sacramento Peak Observatory Sunspot NM USA 88349
ADDITIONAL COMMENTS -----	

AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

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3 OF 13
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A055001



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TEHRAN
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ITEM: 1111
DATE:15/05/75

DISCIPLINE	A06 Solar Maps, Prominences, Filaments
STATION LATITUDE	N 35.70
STATION LONGITUDE	E 51.47
ALTERNATE NAMES	OL-D, 2 Weather Wing
DATES OF OPERATION	12/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Razdow W-120 Optical Telescope (H-alpha); observatory operates daily from sunrise to sunset, takes 35 mm photos of the solar disk at a rate of 1 frame/min; monitors high frequency receivers for detection of SWFs.
RAW DATA	Film, strip charts, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Logs, chart rolls
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	OL-D, 2 Weather Wing APO Box 1500 New York USA 09205
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

A07-1 1 111

A07 Optical Observations of the Corona

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HALEAKALA
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ITEM: 225
DATE:26/01/76

DISCIPLINE	A07 Optical Observations of the Corona
STATION LATITUDE	N 20.71
STATION LONGITUDE	E 203.74
ALTERNATE NAMES	
DATES OF OPERATION	1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	4 inch coronagraph with 2A bandpass, 5303A interference filter. Sequences of 4 exposures taken at intervals ranging from 1 min to 1 h or daily. Image diameter 3.75 cm.
RAW DATA	Film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Marie McCabe Institute for Astronomy 2680 Woodlawn Drive Honolulu HI USA 96822
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	No observations were obtained 9/1971-6/1975. At present they are taken on a daily basis only.

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KISLOVODSK

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ITEM: 976

DATE:29/04/75

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DISCIPLINE ----------	A07 Optical Observations of the Corona
STATION LATITUDE ----------	N 44.70
STATION LONGITUDE ----------	E 42.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	06/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Coronographs with obj. 20 and 53 cm
RAW DATA ----------	Photos, tables, charts
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Tables, photos
DATA ROUTINELY PUBLISHED ----------	SOLAR DATA (Pulkovo Obs) Zurich Quarterly Solar Bulletin
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Kislovodsk Station of Pulkovo Obs P.O. Box 1 Kislovodsk USSR 357741
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS -----	

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LOMNICKY STIT
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ITEM: 992
DATE:20/03/75 1C

DISCIPLINE ---------- A07 Optical Observations of the Corona
STATION LATITUDE ---------- N 49.18
STATION LONGITUDE ---------- E 20.22
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1965 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 20/300 cm Zeiss coronograph (2 pieces), emission coronal lines in range 4 000 - 8 000A, image of corona in 5303A, also polarization. In active regions more observations are made durin the day according to the special program.

RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, photographic paper
DATA ROUTINELY PUBLISHED ---------- SOLAR DATA (USSR), QBSA(Zurich)
SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Vojtech Rusin
Astronomical Institute Skalnate Pleso
Slovak Acad of Sci, Obs Lomnicky Stit
Tatranska Lomnica
Czechoslovakia 059 60

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data are available as tables of the intensities of the corona (5303 and 6374A).

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112

A07 Optical Observations of the Corona (Cont.)

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MAUNA LOA
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ITEM: 394
DATE: 20/02/74

DISCIPLINE	A07 Optical Observations of the Corona
STATION LATITUDE	N 19.53
STATION LONGITUDE	E 155.58
ALTERNATE NAMES	HAO/NCAR Mauna Loa Station
DATES OF OPERATION	12/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	K-Coronameter, Coronal Activity Monitor, Prominence Coronagraph. The K-Coronameter and Coronal Activity Monitor are Optical Polarimeters, attached to coronagraphs to permit measurement of the intensity of the solar white-light (K) corona. The Prominence Coronagraph employs a 10 Angstrom filter centered at H-alpha for photography of solar prominences from the solar limb to a height of 2 R from sun center.
RAW DATA	Paper charts, digital magnetic tape, 70mm film, photographs
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Magnetic tape, film, photographic prints, graphical plots, etc.
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Richard T. Hansen High Altitude Observatory of NCAR P.O. Box 3000 Boulder CO USA 80303
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Reduced data are also in the form of microfilm and computer printouts. Observations are daily, often from an hour after sunrise until an hour before sunset. Data are assembled in Boulder.

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ITEM: 414
DATE:14/04/75

MT NORIKURA

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DISCIPLINE ---------- A07 Optical Observations of the Corona
STATION LATITUDE ---------- N 36.11
STATION LONGITUDE ---------- E 137.55
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1951 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Coronagraph, Optical Observations of the Solar Corona. Intensity measurements of the coronal emission line 5303 A with a direct vision spectroscope.

RAW DATA ---------- Tables
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- Monthly Bulletin on Solar Phenomena, Tokyo Astronomical Obs.

DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Meudon

DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Fumio Moriyama
Tokyo Astronomical Observatory
Osawa 2-21-1
Mitaka Tokyo
Japan 181

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS -----

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ITEM: 460
DATE:13/03/75

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PIC DU MIDI

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ITEM: 460

DATE:13/03/75

DISCIPLINE	A07 Optical Observations of the Corona
STATION LATITUDE	N 42.94
STATION LONGITUDE	E .01
ALTERNATE NAMES	
DATES OF OPERATION	1945 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Coronograph, Optical observations of the Corona. 1)Monochromatic intensity measurements of the intensity of 5303 and 6374 A coronal lines (1945-1974) and 2)Intensity measurement of the K-corona (1964-1975...)
RAW DATA	Tables
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables or graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	J. L. Leroy Observatoire du Pic du Midi Bagneres de Bigorre France 65200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Survey is limited 1)by bad weather period and 2)by lack of a sufficient number of observers. Maximum number of days of observations by year is 120.

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1 113

A07 Optical Observations of the Corona (Cont.)

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SACRAMENTO PEAK
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ITEM: 499
DATE: 23/06/75

DISCIPLINE ---------- A07 Optical Observations of the Corona
STATION LATITUDE ---------- N 32.78
STATION LONGITUDE ---------- E 254.68
ALTERNATE NAMES ---------- Sac Peak
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ----- Universal spectrograph, 60 ft. - capable of photographing the solar spectrum 3500-9000A on (3) 60 cm strips of 35 mm film, 4 inch solar image. Used primarily for solar corona, frequently used for solar flares. Observations scheduled according to scientists demand.

RAW DATA ---------- 35mm film negatives
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Richard B. Dunn
Sacramento Peak Observatory
Sunspot NM
USA 88349

ADDRESS FOR INFORMATION ABOUT DATA -------- Lou B. Gilliam
Sacramento Peak Observatory
Sunspot NM
USA 88349

ADDITIONAL COMMENTS ----- Universal spectrograph is coupled with 40 cm coronagraph.

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SACRAMENTO PEAK
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ITEM: 506
DATE:23/06/75

DISCIPLINE ---------- A07 Optical Observations of the Corona
STATION LATITUDE ---------- N 32.78
STATION LONGITUDE ---------- E 254.68
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 02/1973 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 1)Coronal emission line photometer operates at 5303A with 0.75A bandwidth. Records coronal intensity at 1.15, 1.35 solar radii. Daily observations taken, weather permitting.
2)40cm coronagraph (began operating 1964) feeds East Bench Dual Camera, Spectroheliograph, Littrow spectrograph, coronal emission line photometer and Universal spectrograph.

RAW DATA ---------- Computer printouts, drawings
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Richard B. Dunn
Sacramento Peak Observatory
Sunspot NM
USA 88349

ADDRESS FOR INFORMATION ABOUT DATA -------- Lou B. Gilliam
Sacramento Peak Observatory
Sunspot NM
USA 88349

ADDITIONAL COMMENTS ----- The coronal emission line photometer is coupled to the 40cm coronagraph. Operated from 02/1973 thru 01/1974 and from 12/1974 until present.

1 A08-1 114

A08 Total Radio Flux Measurements

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ARCETRI
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ITEM: 1083
DATE:23/08/76

DISCIPLINE ----------	A08 Total Radio Flux Measurements	
STATION LATITUDE ----------	N	43.75
STATION LONGITUDE ----------	E	11.25
ALTERNATE NAMES ----------		
DATES OF OPERATION ----------	Intermittent operation	
OBSERVING SCHEDULE ----------	Regular	
INSTRUMENT DESCRIPTION -----	Solar Radio Phenomena at 9240, 2830, 1420 MHz	
RAW DATA ----------	Strip chart	
DATA REDUCTION PRACTICE ----------	Regular	
REGULAR REDUCED DATA AVAILABLE AFTER ------	1	MONTHS
FORM OF REDUCED DATA ----------	Tables, computer printouts	
DATA ROUTINELY PUBLISHED ----------		
DATA SENT TO WDC-A ----------	Yes	
DATA SENT TO WDC-B ----------	Yes	
DATA SENT TO WDC-C ----------		
DATA AVAILABLE ON REQUEST ----------	Yes	
ADDRESS FOR INFORMATION ABOUT STATION -----	Giuseppe Tagliaferri Osservatorio Astrofisico di Arcetri Largo E. Fermi, 5 Firenze Italy 50125	
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above	
ADDITIONAL COMMENTS -----		

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ITEM: 1148

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ATHENS

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ITEM: 1148

DATE:15/05/75

DISCIPLINE	A08 Total Radio Flux Measurements
STATION LATITUDE	N 37.85
STATION LONGITUDE	E 23.72
ALTERNATE NAMES	OL-C, 2 Weather Wing
DATES OF OPERATION	12/1965 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Razdow WS-250 Optical Telescope (H-alpha); AFGL Radio Telescopes, AFGL Polarimeter: observatory operates from sunrise to sunset daily, monitors four discrete radio frequencies (1415, 2695, 4995, and 8800 MHz); takes photos of the solar disk at a rate of 1 frame/min; monitors five high frequency receivers for detection of SWFs; monitors total electron content.
RAW DATA	Film, strip charts, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Logs, chart rolls
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	OL-C, 2 Weather Wing APO New York NY USA 09223
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data are at the National Observatory of Athens. The observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

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BOULDER
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ITEM: 63
DATE:18/02/75 1C

DISCIPLINE	A08 Total Radio Flux Measurements
STATION LATITUDE	N 40.10
STATION LONGITUDE	E 254.75
ALTERNATE NAMES	SOLTERWARN
DATES OF OPERATION	10/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Airborne instrument Radio Telescope. Discrete Frequency Radio Telescope (1415, 2695, 4995 MHz) and (245, 606 MHz since 1971), sunrise-sunset patrol. Scheduled and burst reports in flux units to Forecast Center and IUWDS Network.
RAW DATA	Strip charts, coded reports
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip charts, coded reports
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA, Boulder, Colorado, USA 80302)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Space Environment Services Center Space Environment Lab, ERL, NOAA 325 Broadway Boulder CO USA 80302
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of National Solar Flare patrol. Data are available in real time to other Regional Warning Centers.

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BUENOS AIRES

ITEM: 828
DATE:00/00/75 1d

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BUENOS AIRES
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ITEM: 828
DATE: 00/00/75 1d

DISCIPLINE	A08 Total Radio Flux Measurements
STATION LATITUDE	S 34.55
STATION LONGITUDE	E 301.27
ALTERNATE NAMES	
DATES OF OPERATION	01/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Total Solar Radio Flux at 3 cm
RAW DATA	Pen and ink strip charts
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip charts, bulletins
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Mr. J. R. Seibold Dept de Fisica Solar, Obs Nac de Fisica Av. Mitre 3100 San Miguel Argentina
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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A08 Total Radio Flux Measurements (Cont.)

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DWINGELOO
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ITEM: 1085
DATE:24 02/75

DISCIPLINE	A08 Total Radio Flux Measurements
STATION LATITUDE	N 52.81
STATION LONGITUDE	E 6.40
ALTERNATE NAMES	Solar Radio Observatory Neth Found Radio Astronomy
DATES OF OPERATION	12/1968 to present Station moved Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Multi-channel Radio Spectrograph, spectrograms of events, 60-channels, intensity and circular polarization, resolution 1 MHz, 10 ms, coverage 160-320 MHz; recording on film and during short intervals on digital magnetic tape (calibrated recording); observations scheduled according to expected solar activity.
RAW DATA	Film, partly digital magnetic tape partly strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Photo prints, graphical plots
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Toyokawa
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Radio Sterrewacht Dwingeloo Netherlands Foundation Radio Astronomy ATTN: Dr. C. Slottje Dwingeloo Netherlands
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Regular data available on film, special purpose data available on digital mag tape after 1 month. Former station location: Nera (N52.23 E05.08) until 8/1972. Gaps in operation: 8/1971-12/1971, 8/1972-12/1972, 12/1973-1/1974, 4-5/1974, 8/1974-11/1974.

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HAMILTON

ITEM: 945
DATE:14/01/76

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HAMILTON
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ITEM: 945
DATE: 14/01/76

DISCIPLINE ---------- A08 Total Radio Flux Measurements
STATION LATITUDE ---------- N 42.25
STATION LONGITUDE ---------- E 289.00
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Solar radio burst on 9 frequencies
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ John P. Castelli
AFGL - LIR
Hanscom Field
Bedford MA
USA 01731

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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HIRAISO
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ITEM: 258
DATE:20/03/75

DISCIPLINE ---------- A08 Total Radio Flux Measurements
STATION LATITUDE ---------- N 36.37
STATION LONGITUDE ---------- E 140.63
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 07/1957 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- UHF, VHF receiver, 100, 200, 500, 9500 MHz continuously recording 0600-1800 LT on strip chart at 36 cm/h.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- IONOSPHERIC DATA IN JAPAN issued monthly by RRL
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
United Kingdom
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Hiraiso Branch
Radio Research Laboratories
3603 Isozaki-machi
Nakaminato-shi Ibaraki-Ken
Japan 311-12

ADDRESS FOR INFORMATION ABOUT DATA -------- WDC C2 for Ionosphere
Radio Research Laboratories
2-1 Nukui-Kitamachi 4-chome
Koganei-shi Tokyo
Japan 184

ADDITIONAL COMMENTS ----- Special purpose data usually available after 1 month.

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IRKUTSK
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ITEM: 359
DATE:00/00/75

DISCIPLINE ---------- A08 Total Radio Flux Measurements
STATION LATITUDE ---------- N 52.47
STATION LONGITUDE ---------- E 104.03
ALTERNATE NAMES ---------- Zui
DATES OF OPERATION ---------- 12/1958 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Solar Total Radio Fluxes at 3.2 cm, daily
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Drawings
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. V. E. Stepanov
SibIZMIR 664697
P.O.B. 4
Irkutsk
USSR 33

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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A08-3 1 116

A08 Total Radio Flux Measurements (Cont.)

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KASUGAI
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ITEM: 301
DATE:03/03/75

DISCIPLINE	A08 Total Radio Flux Measurements
STATION LATITUDE	N 35.27
STATION LONGITUDE	E 137.01
ALTERNATE NAMES	Chubu
DATES OF OPERATION	01/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Frequencies 6 GHz and 37.5 GHz, 0900-1500 LT, 0000-0600 UT continuously
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables, paper tape
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Dr. Atsushi Kimpara Chubu Institute of Technology 1200 Matsumoto-cho Kasugai-shi Aichi-ken 487 Japan
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data are usually available after two months.

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LA PAZ
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ITEM: 329
DATE:21/01/76 3c

DISCIPLINE ----------	A08 Total Radio Flux Measurements
STATION LATITUDE ----------	S 16.30
STATION LONGITUDE ----------	E 291.91
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1976 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Solar radio/optical phenomena
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Tables, punched paper tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Instituto de Investigaciones Fisicas Laboratorio de Fisica Cosmica Universidad Mayor de San Andres La Paz Bolivia
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ITEM: 985
DATE:15/05/75 3d

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KISLOVODSK
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ITEM: 977
DATE: 29/04/75

DISCIPLINE	A08 Total Radio Flux Measurements
STATION LATITUDE	N 44.70
STATION LONGITUDE	E 42.50
ALTERNATE NAMES	
DATES OF OPERATION	06/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Radio Telescope with mirrors, 2 and 3 m, interferometer
RAW DATA	Photos, tables, charts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, photos
DATA ROUTINELY PUBLISHED	SOLAR DATA (Pulkovo Obs) Zurich Quarterly Solar Bulletin
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Kislovodsk Station of Pulkovo Obs P.O. Box 1 Kislovodsk USSR 357741
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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LA POSTA

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ITEM: 985

DATE:15/05/75

3d

DISCIPLINE ---------- A08 Total Radio Flux Measurements
STATION LATITUDE ---------- N 32.40
STATION LONGITUDE ---------- E 243.50
ALTERNATE NAMES ---------- OL C, 12 Weather Squadron
Navy Electronic Lab Cen (NELC)
DATES OF OPERATION ---------- 10/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Solar Radio Telescopes, 2800 and 8800 MHz, observatory operates daily from sunrise to sunset
RAW DATA ---------- Logs, chart rolls
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Logs, chart rolls
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- OL C, 12th Weather Squadron
Route 1, Box 591
Campo CA
USA 92006

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data are regularly sent to NELC-San Diego.

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A08-4

A08 Total Radio Flux Measurements (Cont.)

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MANILA
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ITEM: 389
DATE: 03/06/75

DISCIPLINE	A08 Total Radio Flux Measurements
STATION LATITUDE	N 14.64
STATION LONGITUDE	E 121.08
ALTERNATE NAMES	
DATES OF OPERATION	01/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Six solar radiometers for 8800, 4995, 2695, 141 606 and 245 MHz, sweep interferometer radiomete for 24-48 MHz -- Dicke type radiometer operatin sunrise to sunset, 0.1 mm/s, twin antennas sepa rated by 300 meters on E-W orientation for swee interferometer.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	The Director Manila Observatory P.O. Box 1231 Manila Philippines D 404
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ITEM: 390

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PALEHUA
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ITEM: 1117
DATE:15/05/75

DISCIPLINE ----------	A08 Total Radio Flux Measurements
STATION LATITUDE ----------	N 21.38
STATION LONGITUDE ----------	E 201.93
ALTERNATE NAMES ----------	OL-D, 1 Weather Wing
DATES OF OPERATION ----------	10/1969 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-120 optical telescope (H-alpha), AFGL radio telescopes; operate from sunrise to sunset daily. Monitors 2 discrete radio frequencies: 1415 and 8800 MHz. Take 35 mm photos of the solar disk at a rate of 1 frame/min. Monitors high frequency receivers for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 1 Weather Wing APO San Francisco USA 96553
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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PENN STATE U

ITEM: 774
DATE:00/00/75

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ONDREJOV
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ITEM: 800
DATE:00/00/75

DISCIPLINE ---------- A08 Total Radio Flux Measurements
STATION LATITUDE ---------- N 49.92
STATION LONGITUDE ---------- E 14.98
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Total Solar Radio Flux at 37, 56 and 115 cm (260, 536 and 808 MHz)

RAW DATA ---------- Magnetic tape
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter, microfilm
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. L. Krivsky
Astronomical Institute
Ondrejov
Czechoslovakia 25165

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------ Co-investigators: Dr. V. Bumba and Mr. Antonin Tlamicha.

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PENN STATE U

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ITEM: 774

DATE:00/00/75

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DISCIPLINE ---------- A08 Total Radio Flux Measurements
STATION LATITUDE ---------- N 40.82
STATION LONGITUDE ---------- E 282.13
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Total solar radio flux, 406, 960, 2700 and 10 700 MHz. Also 36 and 90 MHz.
RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Strip charts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. John P. Hagen
Dept of Astronomy, Pennsylvania State U
525 Davey Laboratory
Univ Park PA
USA 16802

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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A08 Total Radio Flux Measurements (Cont.)

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PENTELI
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ITEM: 905
DATE:18/03/75

DISCIPLINE ----------	A08 Total Radio Flux Measurements
STATION LATITUDE ----------	N 38.05
STATION LONGITUDE ----------	E 23.86
ALTERNATE NAMES ----------	Athens Natl Observatory of Athens
DATES OF OPERATION ----------	08/1970 to present
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION ------	Radio telescope on fixed frequencies 1445, 2695, 5005, 8800 MHz with a 90 inch antenna and a polarimeter for continuous observation.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER -------	0.5 MONTHS
FORM OF REDUCED DATA ----------	Tables, films, photographic paper
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes Meudon, France
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Astronomical Institute National Observatory of Athens Athens Greece 306
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	Special purpose data available after 0.5 months.

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SAGAMORE HILL
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ITEM: 1159
DATE:27/06/75

DISCIPLINE ---------- A08 Total Radio Flux Measurements
STATION LATITUDE ---------- N 42.63
STATION LONGITUDE ---------- E 289.18
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1966 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Solar Radio Telescope, total flux and bursts at 245,410,606,1415,2695,4995,8800,15400,35000MHz sunrise to sunset patrol, Dicke radiometer, multi channel recorders, 1/2inch/min and 6mm/min, antennas: parabola solar tracker, 28ft diameter/ single sideband for 245,410,606,1415MHz, 8ft diameter/dual sideband for 2695,4995,8800MHz, 3ft diameter/dual sideband for 15.4GHz, 18inch diameter for 35GHz. Make noon flux measurements on all but 35 GHz.

RAW DATA ---------- Analog strip charts, charts, drawings, digital data since 1975
DATA REDUCTION PRACTICE ---------- Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, graphical plots, computer printout, punched cards
DATA ROUTINELY PUBLISHED ---------- AFGL in-house, SOLAR-GEOPHYSICAL DATA (NOAA), IAU Quarterly (QBSA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Mr. John P. Castelli
AFGL (LIR)
L.G. Hanscom Field
Bedford MA
USA 01730

ADDRESS FOR INFORMATION ABOUT DATA -------- Mr. William Barron
AFGL (LIR)
L. G. Hanscom Field
Bedford MA
USA 01730

ADDITIONAL COMMENTS ----- Dates of start of monitoring: 245MHz(7/1969), 410MHz (9/1971), 606MHz(1/1966), 1415MHz(1/1966), 2695MHz (1/1966), 4995MHz(4/1966), 8800MHz(1/1966), 15.4GHz (1/1968), 35GHz(1/1969). Sag Hill Solar Radio Observatory is the key station of the USAF AWS Solar Radio Network of 4 stations of the Space Environmental Support System. Data are used in calibrations, warnings of geophysically important events, in-house research. Special purpose data available immediately.

A08-6

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119

A08 Total Radio F

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SLOUGH
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ITEM: 560
DATE:11/07/75

DISCIPLINE ----------	A08 Total Radio Flux Measurements
STATION LATITUDE ----------	N 51.48
STATION LONGITUDE ----------	E 359.43
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Polarimeter and Radiometers, continuous radio observations of the sun. Polarimeter at 2.8 GHz. Radiometers at 9.4, 12, 19, 37, 71 GHz. Chart speed minimum 0.4 cm per hour, scale up to 24 cm. Output from each radiometer monitored by data logger which, in event of solar flare, is triggered into continuous operation and samples signal from each radiometer once per second. Continuous observations.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables, computer-printed burst records
DATA ROUTINELY PUBLISHED ----------	SOLAR RADIO DATA, Appleton Laboratory. Available on request. Tables of operating hours and distinctive events.
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
	Tokyo, Slough
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Solar Radio Observatory Science Research Council, Appleton Lab Ditton Park Slough United Kingdom SL39JX
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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SYDNEY
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ITEM: 583
DATE:07/04/75

DISCIPLINE ----------	A08 Total Radio Flux Measurements
STATION LATITUDE ----------	S 33.87
STATION LONGITUDE ----------	E 150.77
ALTERNATE NAMES ----------	Fleurs
DATES OF OPERATION ----------	12/1954 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	A.I.L. Solar Radio Telescope. Total solar rad flux measurements. Frequencies 1420, 2695, an 4995 MHz. Schedule approx 2200Z to 0700Z. Ch speed 3 mm/minute. Also recording 1 mm/minute
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Fleurs Field Station University of Sydney/IPS Kemps Creek N.S.W. Australia 2171
ADDRESS FOR INFORMATION ABOUT DATA --------	Disturbance Warning Section Ionospheric Prediction Service Dept. of Science, P.O. Box 702 Darlinghurst N.S.W. Australia 2010
ADDITIONAL COMMENTS -----	Data on flux and events supplied daily to IUWDS v URSIGRAM. Former location Carnarvon S24.90 E113.

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A08-7

A08 Total Radio F

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TOYOKAWA
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ITEM: 630
DATE:12/03/75 6a

DISCIPLINE	A08 Total Radio Flux Measurements
STATION LATITUDE	N 34.83
STATION LONGITUDE	E 137.37
ALTERNATE NAMES	
DATES OF OPERATION	11/1951 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Radiometers/Polarimeters, total radio flux and polarization measurements; Center frequencies 9400,3750,2000, 100 MHz. Both side bands 60 MHz apart from the center, each 10 MHz wide. Sum and difference of right- and left-handed circular polarizations are recorded. CMP is about 03 UT, stop at 08 UT when inactive. Chart speed 2mm/min. New instrument will be in operation in 1975 with full daytime coverage and with increased time resolution.
RAW DATA	Strip chart, digital magnetic tape partially available beginning 1976
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED	Monthly report of solar radio emission, Toyokawa Observatory. Regularly available free. Tables of 3-hourly, daily and monthly flux values and tables of distinctive events
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Toyokawa
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Haruo Tanaka Toyokawa Observatory 13 Honhara 3-Chome Toyokawa Japan 442
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 0.1 months.

lux Measurements (Cont.)

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TREMSDORF
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ITEM: 634
DATE:11/08/75

DISCIPLINE	A08 Total Radio Flux Measurements
STATION LATITUDE	N 52.28
STATION LONGITUDE	E 13.13
ALTERNATE NAMES	
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Radiometer and radiopolarimeter, measurement of intensity and polarization of total solar radio flux at different frequencies, observing time 08-14UT during winter and 07-15UT during summer. Absolutely calibrated measurement of 9400, 3000 and 1500 MHz. Radiometers at 9400, 3000, 1500, 287, 510, 234, 64, 15 MHz; polarimeters at 9400, 1500, 775, 40, 23 MHz (circular polarization) and 113 and 30 MHz (circular and linear polarization). Time resolution 23 seconds at 9400, 3000 and 1500 MHz and 0.15 at the other frequencie
RAW DATA	Film, paper records
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Several lists
DATA ROUTINELY PUBLISHED	SOLARE BEOBACHTUNGSERGEBNISSE (SOLAR DATA)Akad d. Wissenschaften d. DDR, Zentralinstitut f. solar-terrestrische Physik (HHI), DDR-1199 Berlin-Adlershof. Tables are published monthly.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Toyokawa
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Annelies Bohme Zentralinst solar-terrestrische Phy Telegrafenberg Haus A50 15-Potsdam German Dem Rep DDR-15
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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A08 Total Radio

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TRIESTE
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ITEM: 635
DATE:28/05/75

DISCIPLINE ---------- A08 Total Radio Flux Measurements
STATION LATITUDE ---------- N 45.64
STATION LONGITUDE ---------- E 13.88
ALTERNATE NAMES ---------- Basovizza Observing Station
DATES OF OPERATION ---------- 03/1966 to present
Station moved 03/1967
Operation intermittent
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Radio polarimeter at 237 MHz, circular (R- and L-handed) polarization of solar activity at 237 MHz. The antenna is a parabolic disc having 10m diameter. Sum and difference of the R- and L-handed polarized signal are recorded on a paper strip at 20 cm/h. R- and L-handed output recorded separately on analog magnetic tape, the time response is better than 0.01 s.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 3 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer plots
DATA ROUTINELY PUBLISHED ---------- Our institution publishes quarterly the bulletin: OSSERVAZIONI SOLARI; this publication is available at the address at the end of this sheet.
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Radio - Solar Group
Trieste Astronomical Observatory
G. B. Tiepolo 11
Trieste
Italy I34131

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------ Gaps in operation: 11/1966; 02/1972; 03/1972; 12/1972; 05/1973-08/1973. Only radiometric measurements: 03/1966-12/1969; 04/1972-06/1972; 01/1973-04/1974. Special purpose data usually available after 3 months. Quarterly bulletin contains hourly mean values of the flux density and the polarization data at 237 MHz; Distinctive events are also enclosed.

io Flux Measurements (Cont.)

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ITEM: 795
DATE:00/00/75

DISCIPLINE ---------- A08 Total Radio Flux Measurements
STATION LATITUDE ---------- N 50.30
STATION LONGITUDE ---------- E 16.01
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Total Solar Radio Flux at 56 cm
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. L. Krisky
Astronomical Institute
Ondrejov
Czechoslovakia 25165

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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A09 Radio and R

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ITEM: 331
DATE:15/05/75 1a

DISCIPLINE	A09 Radio and Radar Maps of Solar Disk
STATION LATITUDE	N 32.40
STATION LONGITUDE	E 243.50
ALTERNATE NAMES	Navy Electronic Laboratory Center (NELC) OL C, 12 Weather Squadron NELC
DATES OF OPERATION	10/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Solar radio telescope operates daily, 60 foot computerized tracking antenna for radio mapping at 15.3 GHz (2.0 cm) and 35.0 GHz (8.6 mm).
RAW DATA	Logs, chart rolls
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Logs, chart rolls
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA, US Dept of Commerce, Boulder, CO 80302 USA)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	OL C, 12th Weather Squadron Route 1, Box 591 Campo CA USA 92006
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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NANCAY
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ITEM: 432
DATE:02/02/76 1b

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d Radar Maps of Solar Disk

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TOYOKAWA
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ITEM: 631
DATE:12/03/75

DISCIPLINE	A09 Radio and Radar Maps of Solar Disk
STATION LATITUDE	N 34.83
STATION LONGITUDE	E 137.37
ALTERNATE NAMES	
DATES OF OPERATION	06/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	3cm Radioheliograph, radio maps of solar disk. Frequency 9415 MHz. 32 2m dishes in EW, 16 1.2 dishes in NS, t-shaped. Unit spacing 86.03 wavelengths. Resolution 2 arcmin in EW, 2 cos Z arcmin in NS, Z being zenith distance. Skip scans in NS during 8 drifts in EW, one map in about 20 min soon after cmp. Record sum and differece of two circular polarizations. Takin several maps/day is scheduled.
RAW DATA	Punched paper tapes, digital MT is scheduled
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	0.1 MONTHS
FORM OF REDUCED DATA	Contour maps, half-tone image
DATA ROUTINELY PUBLISHED	May submit daily maps to SOLAR-GEOPHYSICAL DATA in near future
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Haruo Tanaka Toyokawa Obs, Nagoya Univ, RIA 13 Honohara 3-Chome Toyokawa Japan 442
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	EW dishes are common to the 3 cm grating/compound interferometer described separately. Special purpo data available after 0.1 months.

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NANCAY

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ITEM: 432

DATE:02/02/76

DISCIPLINE	A09 Radio and Radar Maps of Solar Disk
STATION LATITUDE	N 44.40
STATION LONGITUDE	E 2.20
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	408 MHz and 169 MHz East-West Interferometer. 169 MHz: Resolving power 3.4 min, 6 h/day, published in SOLAR-GEOPHYSICAL DATA; 408 MHz: resolving 1.7 min, 2/day.
RAW DATA	Paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Paper
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Monique Pick Meudon Observatory D.A.S.O.P. Meudon France 92190
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Planned: 169 MHz East-West Radioheliograph around March 1976, occasional observations on request. Data reductions for positions.

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A09 Radio and Radar Maps of Solar Disk (Cont.)

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TOYOKAWA
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ITEM: 1143
DATE:12/03/75

DISCIPLINE ---------- A09 Radio and Radar Maps of Solar Disk
STATION LATITUDE ---------- N 34.83
STATION LONGITUDE ---------- E 137.37
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1975 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 8 cm Radioheliograph, radio maps of solar disk, frequency 3750MHz, 32 E-W 16 N-S 3m dishes, T shaped with one dish at the cross point for phase correction. Unit spacing 86.03 wavelengths, resolution 2 arcmin in E-W, 2cos(Z) arcmin in N-S Z being zenith distance. Several scan modes are available through computer control; max speed is one map in 40 s; separate E-W and N-S fan-beam scans are possible. Record sum and difference of 2 circular polarizations for slow scans.

RAW DATA ---------- Digital magnetic tape
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 0.1 MONTHS
FORM OF REDUCED DATA ---------- Contour maps, half-tone image
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. Haruo Tanaka
Toyokawa Obs, Res Inst of Atm, Nagoya
13 Honohara 3-chome
Toyokawa
Japan 442

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Considering to submit daily maps to SOLAR-GEOPHYSICAL DATA in near future. E-W dishes are common to the 8 cm grating/compound interferometer described separately.

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A10 Radio East-W

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NANCAY
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ITEM: 429
DATE:10/06/75

DISCIPLINE	A1Ø Radio East-West Scans of Solar Disk
STATION LATITUDE	N 47.38
STATION LONGITUDE	E .15
ALTERNATE NAMES	
DATES OF OPERATION	1956 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Interferometer working at 169MHz, East-West positions of radio active centers at 169 MHz, resolving power 3.5 min, 3 hours of observing time.
RAW DATA	Paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	M. Pick Meudon Observatory, D.A.S.O.P. Meudon France 92100
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Global flux at 169MHz (8 h/day). Co-investigator: M.F. Lantos

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NANCAY

ITEM: 430
DATE:10/06/75

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st-West Scans of Solar Disk

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NANCAY
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ITEM: 431
DATE:10/06/75

DISCIPLINE ---------- A10 Radio East-West Scans of Solar Disk
STATION LATITUDE ---------- N 47.38
STATION LONGITUDE ---------- E .15
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 12/1975 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Radioheliograph at 169MHz, East-West instrument
50 images/s, polarization, 6 h/day.
RAW DATA ---------- Film, digital magnetic tape
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Films, graphical plots
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ M. Pick
Meudon Observatory
Meudon
France 927100

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Observations are half time.

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NOBEYAMA
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ITEM: 439
DATE:28/03/75

A10 Radio East-West Scans of Solar Disk

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NANCAY

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ITEM: 430

DATE: 10/06/75

DISCIPLINE	A10 Radio East-West Scans of Solar Disk
STATION LATITUDE	N 47.38
STATION LONGITUDE	E .15
ALTERNATE NAMES	
DATES OF OPERATION	1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Interferometer working at 408MHz, East-West positions of radio active centers, Resolving power 1.7 min, 3 hours of observing time.
RAW DATA	Paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	M. Pick Meudon Observatory Meudon France 92100
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Global flux at 408MHz (8 h/day). Co-investigator: M.F. Lantos

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ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Observations are half time.

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NOBEYAMA
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ITEM: 439
DATE:28/03/75

DISCIPLINE ---------- A10 Radio East-West Scans of Solar Disk
STATION LATITUDE ---------- N 35.93
STATION LONGITUDE ---------- E 138.48
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 160 MHz compound interferometer, high-resolution observation of solar emissions. East-West and North-South quick scans (10 times per sec). Two circular polarization measurement, angular resolution about 2 min in E-W, about 3 min in N-S.
RAW DATA ---------- Digital magnetic tape, film, chart record
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Keizo Kai
Nobeyama Solar Radio Sta/Tokyo Astr Ob
Minamimaktmura, Minamisakugun, Nagaro-
Tokyo
Japan 384-13

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data is usually available after 2 months.

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A10 Radio East-West

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NOBEYAMA
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ITEM: 440
DATE: 28/03/07

DISCIPLINE	A10 Radio East-West Scans of Solar Disk
STATION LATITUDE	N 35.93
STATION LONGITUDE	E 138.48
ALTERNATE NAMES	
DATES OF OPERATION	10/1971 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	17GHz interferometer, high-resolution observation of solar cm emissions (East-West drift-scan once per 4 min, angular resolution 3 min in E-W).
RAW DATA	Digital magnetic tape, film, chart record
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Computer printouts (in near future graphical plots will be added)
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Keizo Kai Nobeyama Solar Radio Station Minamimaktmura, Minamisakugun, Nagaro-k Tokyo Japan 384-13
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data usually available after 2 months.

st Scans of Solar Disk (Cont.)

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TOYOKAWA
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ITEM: 632
DATE:12/03/75

DISCIPLINE ---------- A10 Radio East-West Scans of Solar Disk
STATION LATITUDE ---------- N 34.83
STATION LONGITUDE ---------- E 137.37
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1966 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ 3cm grating/compound interferometer, radio east-west scans of solar disk, frequency 9415 MHz, bandwith 6 MHz. 32 2m dishes for grating additional 2 3m dishes for compound, 32 spacings apart, distance between phase centers is 33 spacings, unit spacing 86.03 wavelengths, resolution 1.1 arcmin for grating, 0.4 arcmin for compound; observe sum and difference of right- and left-handed circular polarizations, 2 hours before and after CMP, full digital mt output is scheduled.

RAW DATA ---------- Punched paper tape, charts
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER -------- 0.1 MONTHS
FORM OF REDUCED DATA ---------- Graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ---------- Flux for each active region, its position, flux ratio 3cm/8cm are in Ursigram, position of events is in URSIGRAM and monthly Report of Solar Radio Emission, Toyokawa Observatory.
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Haruo Tanaka
Toyokawa Observatory, Nagoya Univ,
13 Honohara 3-chome
Toyokawa
Japan 442

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------ The grating interferometer is common to the 3 cm radioheliograph described separately. Observations by 8-element grating started 8/1959, 16-element grating 09/1961, 16+2 grating/compound 03/1962. No observations 3-6/1966. Special purpose data available after 0.1 months. Raw data are on punched paper tape for 1 scan/day, 256 samples/40 arcmin. Other scans on chart at a chart speed of 4mm/arcmin. Reduced data are graphical plots of phase-corrected normalized drift curves, and their computer printouts. UPSIGRAM code URALR.

A10 Radio East-West

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TOYOKAWA
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ITEM: 1144
DATE:12/03/75

DISCIPLINE	A10 Radio East-West Scans of Solar Disk
STATION LATITUDE	N 34.83
STATION LONGITUDE	E 137.37
ALTERNATE NAMES	
DATES OF OPERATION	07/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	8 cm grating/compound interferometer, radio East-West scans of solar disk; frequency 3750 MHz, 32+2 3m dishes, total 63.5 spacings; unit spacing 86.03 wavelengths; resolution 1.1 arcmin for grating, 0.4 arcmin for compound. Observe sum and difference of right- and left-handed circular polarizations, 2 h before and after CMP; other scans are normally 1 scan/10 s; full digital MT output is scheduled.
RAW DATA	Punched paper tape, charts
DATA REDUCTION PRACTICE	Regular Special
REGULAR REDUCED DATA AVAILABLE AFTER	0.1 MONTHS
FORM OF REDUCED DATA	Graphical plots, computer printouts, URSIGRAM code URALR
DATA ROUTINELY PUBLISHED	URSIGRAM-flux for each active region, its position, flux ratio 3cm/8cm, position of events (also in MONTHLY REPORT OF SOLAR RADIO EMISSION, TOYOKAWA OBSERVATORY)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Haruo Tanaka Toyokawa Obs, Res Inst of Atm, Nagoya U 13 Honohara 3-chome Toyokawa Japan 442
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Grating interferometer is common to the 8cm radioheliograph described separately. Observations by 5 elements at 4000 MHz started 3/1953, 8 elements 5/1954 to 10/1967. Raw data on punched paper tape for 1 scan/day, 256 samples/40 arcmin. Quick scans during bursts are reproduced on charts, about 3mm/arcmin. Reduced data are graphical plots of phase-corrected normalized drift curves, their computer printouts, URSIGRAM code URALR.

est Scans of Solar Disk (Cont.)

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ITEM: 636
DATE:28/05/75

DISCIPLINE	A10 Radio East-West Scans of Solar Disk
STATION LATITUDE	N 45.64
STATION LONGITUDE	E 13.88
ALTERNATE NAMES	Basovizza Observing Station
DATES OF OPERATION	01/1971 to present Operation intermittent
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Interferometer at 408 MHz, interferometric and radiometric data during a period of about two hours near the local solar meridian transit, chart speed 72 cm/h. Resolving power: 17 min f the background and 1 min for bursts.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	Published quarterly bulletin OSSERVAZIONI SOLARI; this publication is available at the address at the end of this sheet
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Radio - Solar Group Trieste Astronomical Observatory G. B. Tiepolo 11 Trieste Italy I34131
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Gaps in operation: 11/1971-03/1972; 10/1974. We also measured sunspot position, type and Wolf numb from 01/1966 to 09/1970 and sunspot areas from 01/1969 to 09/1970. Special purpose data usually available after 3 months. Quarterly bulletin contains daily the interferometric position, the visi bility function, and the total flux density measur near the solar meridian transit.

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All Solar X-Ray and UV Background Levels

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BOULDER
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ITEM: 921
DATE:18/03/75

DISCIPLINE	All Solar X-ray and UV Background Levels
STATION LATITUDE	N 39.98
STATION LONGITUDE	E 254.72
ALTERNATE NAMES	Boulder Observatory SOLTERWARN
DATES OF OPERATION	1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Satellite X-ray, Particle and Magnetic Sensors, ATS-1, GOES-1, GOES-2: Geostationary satellites with X-ray, particle and magnetic sensors provide continuous data to SOLTERWARN.
RAW DATA	Strip charts, magnetic tape
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip charts magnetic tape
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Space Environment Services Center Space Environment Lab, ERL, NOAA 325 Broadway Boulder CO USA 80302
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of the US Operational Flare Patrol Network. Events are sent to other Regional Warning Centers in real time.

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A12 Energetic Sola

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BOULDER
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ITEM: 922
DATE:18/03/75

DISCIPLINE	A12 Energetic Solar Protons and Solar Electrons
STATION LATITUDE	N 39.98
STATION LONGITUDE	E 254.72
ALTERNATE NAMES	Boulder Observatory SOLTERWARN
DATES OF OPERATION	1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Satellite X-ray, Particle and Magnetic Sensors, ATS-1, GOES-1, GOES-2: Geostationary satellites with X-ray, particle and magnetic sensors provide continuous data to SOLTERWARN.
RAW DATA	Strip charts, magnetic tape
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip charts, magnetic tape
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Space Environment Services Center 325 Broadway Boulder CO USA 80302
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of the US Operational Flare Patrol Network. Events are sent to other Regional Warning Centers in real time.

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/03/75

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A14 Comet Tails, Interplane

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CLARK LAKE
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ITEM: 116
DATE:03/03/75

DISCIPLINE	A14 Comet Tails, Interplanetary Scintillations, Zodiacal Light
STATION LATITUDE	N 33.34
STATION LONGITUDE	E 243.72
ALTERNATE NAMES	
DATES OF OPERATION	06/1964 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Cocoa Cross Radio Telescope, interplanetary scintillation, 34.3MHz Mills Cross, collecting area 72 000 sq-m, declinations north of -20 degrees, no observations within 20 degrees of sun; currently more than 70 sources monitored for IPS activity, to be expanded to at least 200 by late 1975; 24h/day observation; chart speed 20s/mm, synoptic measurements of index, frequency scale.
RAW DATA	Film, paper chart, digital tape, computer printout
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1-2 MONTHS
FORM OF REDUCED DATA	Tables, plots, microfilm, magnetic tape
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Cocoa Cross Radio Telescope University of Iowa P. O. Box 626 Borrego Spring CA USA 92004
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	15/07/74-15/08/74-no data; 22/10/74-01/03/75-Intermittent operation

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anetary Scintillations, Zodiacal Light

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FUJIGANE
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ITEM: 779
DATE:00/00/75

DISCIPLINE ----------	A14 Comet Tails, Interplanetary Scintillations Zodiacal Light
STATION LATITUDE ----------	N 35.41
STATION LONGITUDE ----------	E 138.61
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Interplanetary Scintillations, 69.3 MHz.
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter, computer printout
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -------	Mr. Takakiyo Kakinuma Research Institute of Atmospheric Nagoya University Toyokawa Aichi Japan 442
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS -------	

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ITEM: 226

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LA JOLLA
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ITEM: 326
DATE:15/01/76 1C

DISCIPLINE ---------- A14 Comet Tails, Interplanetary Scintillations, Zodiacal Light
STATION LATITUDE ---------- N 32.51
STATION LONGITUDE ---------- E 242.58
ALTERNATE NAMES ---------- UCSD
DATES OF OPERATION ---------- 05/1972 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 74 MHz antennas. Daily observations of solar wind speed by the technique of interplanetary scintillations (IPS) in and out of ecliptic.

RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Magnetic tape
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA, US Dept of Commerce, Boulder, CO 80302) solar wind speed data
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. W. A. Coles
Univ. of California at San Diego
Applied Physics Information Science
La Jolla CA
USA 92093

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- STIP, frequent data gaps for a variety of reasons, but some data nearly every day. Raw data are radio intensity. Inferred quantity is solar wind speed.

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A14 Comet Tails, Interplanetary

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OOTY
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ITEM: 448
DATE: 24/02/75

DISCIPLINE	A14 Comet Tails, Interplanetary Scintillations, Zodiacal Light
STATION LATITUDE	N 11.38
STATION LONGITUDE	E 76.67
ALTERNATE NAMES	Ootacamund
DATES OF OPERATION	02/1970 to present
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	OOTY Radio Telescope, Interplanetary Scintillation studies of sources around the solar path. 530mx30m long parabolic cylinder placed on a N-S slope of 11.38 degrees making it parallel to axis of earth. Capable of rotation in h angle from -4h to 5h30m. Electronic beam steering in declination over + and - 35 degrees. Operating frequency 326.5MHz, BW 4MHz; Time constant from 50ms to 1s; Total power & phase switched receiver system; phase switched beam 2 degrees x 3.6 arcmin. More information below.
RAW DATA	Strip charts, digital magnetic tape, computer printouts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3-6 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Librarian Radio Astronomy Centre, T.I.F.R. P.B. No. 8 Ootacamund Tamil Nadu India 643001
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Gaps in operation from 12/1971 to 05/1973. Intermittent monitoring of sources around sun; sources in comet tail, etc. Normal chart speed 1-2 inch/min, capable of up to 125 mm/s.

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SUGADAIRA
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ITEM: 778
DATE:00/00/75

DISCIPLINE ---------- A14 Comet Tails, Interplanetary Scintillations, Zodiacal Light
STATION LATITUDE ---------- N 36.51
STATION LONGITUDE ---------- E 138.35
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Interplanetary Scintillations, 69.3 MHz.
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter, computer printout
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Mr. Takakiyo Kakinuma
Research Institute of Atmospherics
Nagoya University
Toyokawa Aichi
Japan 442

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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TENERIFE
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ITEM: 1105
DATE:03/03/75

DISCIPLINE ---------- A14 Comet Tails, Interplanetary Scintillations, Zodiacal Light
STATION LATITUDE ---------- N 28.48
STATION LONGITUDE ---------- E 343.72
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1970 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Photopolarimeter telescope for zodiacal light
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS

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TENERIFE

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ITEM: 1105
DATE: 03/03/75

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DISCIPLINE ---------- A14 Comet Tails, Interplanetary Scintillations, Zodiacal Light

STATION LATITUDE ---------- N 28.48

STATION LONGITUDE ---------- E 343.72

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 01/1970 to present
Intermittent operation

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- Photopolarimeter telescope for zodiacal light

RAW DATA ---------- Strip chart

DATA REDUCTION PRACTICE ----------

REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS

FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Instituto Universitario de Astrofisica
Universidad de la Laguna
La Laguna Tenerife
Spain

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS -----

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A14 Comet Tails, Interplan

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TOYOKAWA
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ITEM: 780
DATE:00/00/75

DISCIPLINE ---------- A14 Comet Tails, Interplanetary Scintillations, Zodiacal Light
STATION LATITUDE ---------- N 34.83
STATION LONGITUDE ---------- E 137.37
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Interplanetary Scintillations, 69.3 MHz
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter, computer printou
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Mr. Takakiyo Kakinuma
Research Institute of Atmospheri
Nagoya University
Toyokawa Aichi
Japan 442

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

s, Interplanetary Scintillations, Zodiacal Light (Cont.)

ITEM: 780
DATE:00/00/75

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A16 T

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BAGUIO
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ITEM: 43
DATE:22/05/75

DISCIPLINE ---------- A16 Total Solar Radiation
STATION LATITUDE ---------- N 16.42
STATION LONGITUDE ---------- E 120.60
ALTERNATE NAMES ---------- Baguio Weather Station
DATES OF OPERATION ---------- 03/1971 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Kipp & Zonen pyranometer and galvanometric recorder. Measurement of total solar radiation. Thermoelectric sensor connected to printing galvanometric recorder. Schedule of observation is from 2100 GMT to 1200 GMT.

RAW DATA ---------- Tables, computer printouts
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer printouts
DATA ROUTINELY PUBLISHED ---------- RADIANT ENERGY AND SUNSHINE, published by PAGASA (monthly summary of hourly and daily radiation values)

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Baguio Weather Station
Baguio City
Philippines

ADDRESS FOR INFORMATION ABOUT DATA -------- National Radiation Center
PAGASA
1424 Quezon Blvd. Ext.
Quezon City
Philippines

ADDITIONAL COMMENTS ----- Gaps in operation: April, October 1972: Feb., May, June 1973.

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tal Solar Radiation

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CATARMAN
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ITEM: 98
DATE:22/05/75

DISCIPLINE	A16 Total Solar Radiation
STATION LATITUDE	N 12.52
STATION LONGITUDE	E 124.67
ALTERNATE NAMES	UEP Agromet
DATES OF OPERATION	01/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Pyranometer with galvanometric recorder (Kipp & Zonen). Recording and measurement of total sola radiation. Thermoelectric sensor connected to printing galvanometric recorder. Schedule of ob servation is from 2100 GMT to 1200 GMT.
RAW DATA	Tables, strip chart, computer printouts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	RADIANT ENERGY AND SUNSHINE published by PAGASA. Monthly sum mary of hourly and daily radiatio values
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Catarman Agrometeorological Stati Univ. of Eastern Philippines Catarman Northern Samar Philippines
ADDRESS FOR INFORMATION ABOUT DATA	National Radiation Center PAGASA 1424 Quezon Blvd. Ext. Quezon City Philippines
ADDITIONAL COMMENTS	

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EBRO
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ITEM: 621
DATE:06/06/75

DISCIPLINE	A16 Total Solar Radiation
STATION LATITUDE	N 40.82
STATION LONGITUDE	E .49
ALTERNATE NAMES	Tortosa
DATES OF OPERATION	03/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Kipp and Zonen solarigraph, total solar radi-

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EBRO
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ITEM: 621
DATE:06/06/75

DISCIPLINE	A16 Total Solar Radiation
STATION LATITUDE	N 40.82
STATION LONGITUDE	E .49
ALTERNATE NAMES	Tortosa
DATES OF OPERATION	03/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Kipp and Zonen solarigraph, total solar radiation, continuous recording.
RAW DATA	Paper strip chart
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables; reduction interrupted at present, will resume soon.
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	No
DATA SENT TO WDC-B	No
DATA SENT TO WDC-C	No
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Observatorio del Ebro Roquetas Tarragona Spain
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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A16 Total So

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LOS BANOS
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ITEM: 359
DATE: 22/05/75

DISCIPLINE	A16 Total Solar Radiation
STATION LATITUDE	N 14.22
STATION LONGITUDE	E 121.25
ALTERNATE NAMES	UPCA Los Banos
DATES OF OPERATION	01/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Eppley 180 degree pyrheliometer with Leeds and Northrup potentiometric recorder, schedule of observations is from 2100 UT to 1200 UT, 1 inch/h chart speed
RAW DATA	Tables, strip charts, computer printouts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	RADIANT ENERGY AND SUNSHINE published by PAGASA. Monthly summary of hourly and daily radiation values.
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	College Weather Station University of the Philippines College of Agriculture LosBanos Laguna Philippines
ADDRESS FOR INFORMATION ABOUT DATA	National Radiation Center PAGASA 1424 Quezon Blvd Ext Quezon City Philippines
ADDITIONAL COMMENTS	

olar Radiation (Cont.)

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LOWELL
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ITEM: 361
DATE: 25/03/75

DISCIPLINE	A16 Total Solar Radiation
STATION LATITUDE	N 35.20
STATION LONGITUDE	E 248.34
ALTERNATE NAMES	
DATES OF OPERATION	1950 to present Gap 1967-1971
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Reflecting Astronomical Telescope, photoelectric measurements of Uranus, Neptune, and Saturns satellite Titan. Photoelectric observations in two wavelengths (0.44, 0.56 micron) of reflected sunlight from Uranus, Neptune and Titan calibrated with respect to the brightness of a set of 1 standard stars.
RAW DATA	Punched paper tape (ASCII), printout
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Computer printout
DATA ROUTINELY PUBLISHED	Older data (before 1966) published in BULLETIN OF LOWELL OBSERVATORY
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Lowell Observatory Flagstaff Arizona USA 86001
ADDRESS FOR INFORMATION ABOUT DATA	G. W. Lockwood Lowell Observatory Flagstaff AZ USA 86001
ADDITIONAL COMMENTS	Operation 1950-66, 1972-present, seasonally variable according to the positions of the planets.

A16-3

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A16 Total Sol

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MANILA
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ITEM: 386
DATE:22/05/75

DISCIPLINE	A16 Total Solar Radiation
STATION LATITUDE	N 14.65
STATION LONGITUDE	E 121.06
ALTERNATE NAMES	Quezon City
DATES OF OPERATION	01/1960 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Kipp + Zonen pyranometer (sensor), Electronik Strip Chart Recorder, recording and measurement of total solar radiation. The detector (sensor), is a differential thermopile with the hot-junction receiver blackened and the cold-junction receiver whitened. The recorder is a multi-point strip chart (Electronik) recorder. Schedule of observations is from 2100 GMT to 1200 GMT. Chart speed is 1 inch/h.
RAW DATA	Strip charts, computer printouts, tables
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	RADIANT ENERGY AND SUNSHINE monthly summary of hourly and daily solar radiation values
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	National Radiation Center Phil Atmos Geophys Astr Serv Ad PAGASA 1424 Quezon Blvd. Ext. Quezon City Philippines
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	RADIANT ENERGY AND SUNSHINE is published by PAGASA

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MANILA
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ITEM: 387
DATE:18/05/75

DISCIPLINE ---------- A16 Total Solar Radiation
STATION LATITUDE ---------- N 14.64
STATION LONGITUDE ---------- E 121.08
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 03/1972 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Solar Photometer, photo-sensitive cell mounted on telescope records hours of clear sun. Instrument is standard cadmium sulphide cell with power supply. Output is taken on a Brush Penmotor geared to 2 mm/min. Full deflection on clear sun restricted to 2 cm.
RAW DATA ---------- Charts
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Original chart
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Manila Observatory
P.O. Box 1231
Manila
Philippines D 404

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ----- Intensity control on Halle-Lyot filter refractor stops photograps while sun is covered by clouds. Number of photographs gives us hours of sunlight.

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SAGAMORE HILL
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ITEM: 508
DATE:13/03/75

DISCIPLINE ---------- A16 Total Solar Radiation
STATION LATITUDE ---------- N 42.63
STATION LONGITUDE ---------- E 289.18
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1966 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Dicke Radiometer. Sunrise to sunset patrol plus daily flux measurement. Monitor solar fluxes on nine discrete frequencies - 245, 410, 606, 1415, 2695, 4995, 8800, 15400, 35000 MHz. Make noon flux measurement on all but 35000 MHz. Operation is sunrise to sunset. Chart speed is 0.1 mm/s.
RAW DATA ---------- Analog Sanborn 6-channel record-

Number of photographs gives us hours of sunlight.

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SAGAMORE HILL
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ITEM: 508
DATE:13/03/75

DISCIPLINE	A16 Total Solar Radiation
STATION LATITUDE	N 42.63
STATION LONGITUDE	E 289.18
ALTERNATE NAMES	
DATES OF OPERATION	01/1966 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Dicke Radiometer. Sunrise to sunset patrol plus daily flux measurement. Monitor solar fluxes on nine discrete frequencies - 245, 410, 606, 1415, 2695, 4995, 8800, 15400, 35000 MHz. Make noon flux measurement on all but 35000 MHz. Operation is sunrise to sunset. Chart speed is 0.1 mm/s.
RAW DATA	Analog Sanborn 6-channel recorders, computer automated reduction
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Computer printouts, punched cards
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	John P. Castelli AFGL Hanscom AFB Bedford MA USA 01730
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of USAF Air Weather Service Space Environmental Support System (SESS) Observing Network. Data reduction of noon fluxes and burst information is computer automated.

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A16 Total Sol

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ITEM: 1089
DATE:12/11/76

DISCIPLINE	A16 Total Solar Radiation
STATION LATITUDE	N 53.10
STATION LONGITUDE	E 18.55
ALTERNATE NAMES	Nicolaus Copernicus University Piwnice Astronomical Obs
DATES OF OPERATION	10/1958 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Simple Interferometer, total flux observations at 127 MHz; the interferometer consists of 2 antenna placed 23.6 m (10 wavelengths) apart along E-W direction. The signal of sine pattern is detected in a Dicke radiometer of 230 kHz IF bandwidth and 2 s LF time constant. Recorder, s tape (paper) speed is 16 cm/h. Data reduced manually except the daily mean fluxes which are calculated with a minicomputer.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	QBSA data of daily mean fluxes since 10/1958; SOLAR-GEOPHYSICAL DATA (NOAA) complete data of outstanding occurrences since 1/1975
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Toyokawa
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Kazimierz Borkowski Inst of Astronomy, Nicolaus Copernicus Chopina 12/18 Torun Poland PL 87-100
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	127 MHz observations for 10/1958-1/1960 made with parabolic (12 m dish) antenna. Interferometric observations carried out since 9/1960. Gaps in observations (longer than or equal to 1 month): 2-8/1960, 7/1972, 1-5/1973, 7/1974. Records for 12/1973 are not yet reduced.

Solar Radiation (Cont.)

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VICTORIAS
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ITEM: 661
DATE:22/05/75

DISCIPLINE	A16 Total Solar Radiation
STATION LATITUDE	N 10.90
STATION LONGITUDE	E 123.07
ALTERNATE NAMES	
DATES OF OPERATION	06/1971 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Pyranometer (EKO, Japanese make) with printing integrator (Mark V Lintronic), recording and measurement of total solar radiation. Thermo-electric sensor connected to printing volttime integrator. Schedule of observation is from 2100 GMT to 1200 GMT daily. One print per hour
RAW DATA	Paper tapes, tables
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	RADIANT ENERGY AND SUNSHINE, published by PAGASA, monthly summary of hourly and daily solar radiation values
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Victorias Milling Company Bacolod City Philippines
ADDRESS FOR INFORMATION ABOUT DATA	National Radiation Center PAGASA 1424 Quezon Blvd. Ext. Quezon City Philippines
ADDITIONAL COMMENTS	

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B. Ionospheric Phenomena

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B01 Ionosph

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AHMEDABAD
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ITEM: 730
DATE:00/00/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 23.00
STATION LONGITUDE ---------- E 72.60
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Ionosonde, 0.6-25 MHz
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------- Prof. Ram Gopal Rastogi
Physical Research Laboratory
Navrangpura
Ahmedabad Gujarat
India 380009

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS -------

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AKITA
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ITEM: 5
DATE:20/03/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 39.73
STATION LONGITUDE ---------- E 140.14
ALTERNATE NAMES ---------- Ak, 539

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ITEM:
DATE:

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 43.25
STATION LONGITUDE ----------	E 76.92
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1943 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Ionosonde
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER --------	MONTHS
FORM OF REDUCED DATA ----------	Photographic prints,
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	M. P. Rudina Ionospheric Section, 68 Kamenskoe Plato Alma-Ata USSR
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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, 15, 30 and
10 cm/obs.

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PAN, issued

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ITEM: 831
DATE:00/00/75

Ionosphere Vertical Soundings
3.25
6.92

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ON ---

MONTHS
Photographic prints, black/white

M. P. Rudina
Ionospheric Section, Acad Sci of Kaz SSR
68 Kamenskoe Plato
Alma-Ata
USSR

Same as above

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AKITA
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ITEM: 5
DATE:20/03/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 39.73
STATION LONGITUDE ---------- E 140.14
ALTERNATE NAMES ---------- Ak. 539
DATES OF OPERATION ---------- 12/1949 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Type 8 (Japanese made) Ionosonde, peak power 10 kW, frequency sweep 1-20 MHz. 00, 15, 30 and 45 min past every hour, 35 mm film: 10 cm/obs.

RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ---------- IONOSPHERIC DATA IN JAPAN, issued monthly by RRL, tables, f-plots.
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
United Kingdom
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Akita Radio Wave Observatory
Radio Research Laboratories
6-1 Tegata-Sumiyoshi-cho
Akita-shi Akita-ken
Japan 010

ADDRESS FOR INFORMATION ABOUT DATA -------- WDC-C2 for Ionosphere
Radio Research Laboratories
2-1, Nukui-Kitamachi 4-chome
Koganei-shi Tokyo
Japan 184

ADDITIONAL COMMENTS ----- INAG. Special purpose data available after 1 month.

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B01 Ionosphere Vertical Soundings (Cont.)

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ARGENTINE ISLANDS
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ITEM: 27
DATE:20/06/75

DISCIPLINE ----------
B01 Ionosphere Vertical Soundings

STATION LATITUDE ---------- S 65.25
STATION LONGITUDE ---------- E 295.73
ALTERNATE NAMES ---------- Port Lockroy
DATES OF OPERATION ---------
04/1957 to present
Station moved

OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- D.S.I.R. Mark II (Union Radio) Ionosonde. Ionosphere vertical incidence soundings 1/4 hourly. Expanded height scale (300 km) to 3 MHz on 1/2 h. Frequency range 0.65-15 MHz, sweep time 4 min. Peak power 1 kW. P.R.F. 50 Hz. Pulse length normally 150 microsec. Height range 1000km (normal), 300 km (expanded). Vertical rhombic antennas.

RAW DATA ---------- 70mm photographic paper(to 2/1969)
35 mm film (from 3/1969)

DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Computer printout, punched cards, magnetic tape, f-plots

DATA ROUTINELY PUBLISHED ---------- IONOSPHERIC DATA-ARGENTINE ISLANDS, publication of WDC-C1

DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Slough, United Kingdom

DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. J. R. Dudeney
British Antarctic Survey
c/o Appleton Laboratory
Ditton Park Slough, Bucks
England SL3 9JX

ADDRESS FOR INFORMATION ABOUT DATA -------- World Data Centre - C1
Appleton Laboratory
Ditton Park
Slough Bucks
England SL3 9JX

ADDITIONAL COMMENTS ----- Moved from Port Lockroy(S64.82 E296.50) in 1/1961 to present site. Data processed in yearly batches, available after 5-18 months. Special purpose data available after 1 month.

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ASHKHABAD
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ITEM: 847
DATE:00/00/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 37.93
STATION LONGITUDE	E 58.37
ALTERNATE NAMES	
DATES OF OPERATION	03/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde at 1-18 MHz, hourly tables of the ionospheric parameters and f-plots.
RAW DATA	35 mm cinematographic film
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. O. Ovezgeldyev Inst Phys Earth & Atm, Acad Sci Turk Gogol Street 16 Ashkhabad USSR 744019
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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AUCKLAND
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ITEM: 38
DATE:17/02/76

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 37.00

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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AUCKLAND
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ITEM: 38
DATE:17/02/76

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- S 37.00
STATION LONGITUDE ---------- E 175.00
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1965 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- C2 Ionosonde, virtual h(f) records. Ionograms recorded every 15 min on 35 mm film.
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 4 MONTHS
FORM OF REDUCED DATA ---------- Tables (hourly values)
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. J. E. Titheridge
Radio Research Centre
University of Auckland
Auckland
New Zealand

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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B01-3 B01-3

B01 Ionosphere V

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BALERMA
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ITEM: 47
DATE:06/06/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 36.75
STATION LONGITUDE	E 357.17
ALTERNATE NAMES	
DATES OF OPERATION	01/1972 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde, top sounding, 0.25-20 MHz, time interval 1 h during the night, 1/2 h during day.
RAW DATA	Films
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	J. M. Quintana Observatorio Universitario de Cartuja Granada Spain
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Reductions of observations are available only since 11/1972.

e Vertical Soundings (Cont.)

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BEKESCSABA
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ITEM: 73
DATE:15/04/75

DISCIPLINE ----------	B01 Ionospheric Vertical Soundings
STATION LATITUDE ----------	N 46.67
STATION LONGITUDE ----------	E 21.17
ALTERNATE NAMES ----------	Budapest
DATES OF OPERATION ----------	07/1954 to present Station moved Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	IRX ionosonde/Hungarian made automatic ionospher ic recorder. Pulse repetition frequency of the transmitter 50 c/s, pulse length 50 micros. Pe power of the pulse: about 40 kW. Functioning the recorder between 0.5 - 20 Mc/s; linear frequency range; time of frequency sweeping 35 s. Recordings are made on 35 mm film. Crystal-controlled frequency markers with an accuracy o 0.1 Mc/s. Observations are every hour, at 1/4 of an hour on RWD.
RAW DATA ----------	35 mm film
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Hourly measurements in tables, f-plots on RWDs
DATA ROUTINELY PUBLISHED ----------	IONOSPHERIC DATA (monthly)
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Ionospheric Station of Bekescsab Bekescsaba Fenyes Hungary 5600
ADDRESS FOR INFORMATION ABOUT DATA --------	Meteorological Service of the Hungarian Peoples Republic P.O. Box 38 Budapest Hungary H-1525
ADDITIONAL COMMENTS -----	Observations from 7/1954 to 12/1959 in Budapest (N46.43 E19.18). Measurements stopped from 1/1960 to 12/1963, and 3/1969 to 12/1971. Special purpos data available after 1 month.

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B01 Ionosphere V

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BELGRANO
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ITEM: 51
DATE:02/06/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 77.97
STATION LONGITUDE	E 321.20
ALTERNATE NAMES	General Belgrano
DATES OF OPERATION	06/1962 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde
RAW DATA	Film
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	Data are published by Instituto Antartico Argentino as scientific contributions.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Horacio A. Cazeneuve Instituto Antartico Argentino Cerrito 1248 Buenos Aires Argentina
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 4 months.

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BEVERIDGE
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ITEM: 56
DATE:26/02/76

DISCIPLINE ---------- B01 Ionospheric Vertical Soundings

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BOULDER
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ITEM: 66
DATE:14/02/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 40.03
STATION LONGITUDE ---------- E 254.70
ALTERNATE NAMES ---------- Boulder Ionospheric Sounding
IONBC
Boulder Field Station
DATES OF OPERATION ---------- 06/1957 to present
Intermittent operation 57/58/59
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ---- The C2/4, C3/4 and C4 ionosondes have all been used at various times. Since 2/1973 the instrument is a C2/4. Vertical incidence sweeps every 15 min, sweeping from 250 to 20 000 kHz in 30 s. During special events, 5 min sweeps are obtained and on rare occasions continuous observations ar made. 12 to 15 kW peak power is in a large aperiodic delta antenna.

RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, graphs
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Boulder Ionospheric Field Station
NOAA/EDS D61
Attn: John J. Pitts
Boulder CO
USA 80302

ADDRESS FOR INFORMATION ABOUT DATA -------- World Data Center A for STP
NOAA
ATTN: J. V. Lincoln
Boulder CO
USA 80302

ADDITIONAL COMMENTS ----- The Boulder Field Station has been used for years a a training station for Antarctic personnel as well as technical personnel for other stations in the world-wide network. This site is also used for testing rebuilt sounders and final on the air tests are conducted at this location. Special purpose data available after 1/2 month on request. Daily scalings on 7E form, plus f-plots and monthly tabulations available from WDC-A. Raw data stored at WDC-A.

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 4 months.

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BEVERIDGE

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ITEM: 56
DATE:26/02/76

DISCIPLINE ---------- B01 Ionospheric Vertical Soundings
STATION LATITUDE ---------- S 37.47
STATION LONGITUDE ---------- E 144.93
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- C-4 Ionosonde, Chirpsounder
Aim is to take an ionogram every 15 minutes.
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. K. D. Cole
La Trobe University
Div. of Theoretical and Space Physics
Bundoora Victoria
Australia 3083

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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B01 Ionosphere V

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BRISBANE
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ITEM: 70
DATE:31/03/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 27.53
STATION LONGITUDE	E 152.91
ALTERNATE NAMES	
DATES OF OPERATION	06/1943 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IPS Type IIIE ionosonde, routine vertical soundings every 15 min.
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, computer printout
DATA ROUTINELY PUBLISHED	Australian ionspheric data computer listing monthly vertical incidence data.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
	Tokyo, Slough
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Assistant Secretary Ionospheric Prediction Service P.O. Box 702 Darlinghurst N.S.W. Australia 2010
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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BUENOS AIRES
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ITEM: 818
DATE:00/00/75

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B01 Ionosphere Vertical Soundings (Cont.)

ITEM: 70
DATE:31/03/75

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Slough

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lia 2010

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CACHOEIRA PAULISTA
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DISCIPLINE	B01 Ionosphere Vertic
STATION LATITUDE	S 22.70
STATION LONGITUDE	E 314.98
ALTERNATE NAMES	Sao Jose dos Campos Cachoeira Paulista (B San Jose
DATES OF OPERATION	03/1973 to present Intermittent operatio
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Magnetic AB mode 1005 soundings. Transmitt dipole and logperiodi operating frequency i Observations are take
RAW DATA	Films,
DATA REDUCTION PRACTICE	Regula
REGULAR REDUCED DATA AVAILABLE AFTER	2
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	BOLETI in the tion o
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Divisa Instit Caixa Sao Jo Brazil
ADDRESS FOR INFORMATION ABOUT DATA	Same a
ADDITIONAL COMMENTS	Gaps in operation: 06/73 01/75-08/75.

ITEM: 818
DATE:00/00/75

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******** ITEM: 533
DATE:06/11/75 4 2
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------ B01 Ionosphere Vertical Soundings
------ S 22.70
------ E 314.98
------ Sao Jose dos Campos
Cachoeira Paulista (BZ)
San Jose
------ 03/1973 to present
Intermittent operation
------ Regular
----- Magnetic AB mode 1005W. Ionosphere vertical soundings. Transmitting antennas are folded dipole and logperiodic and received on a dipole operating frequency in sweep from .25-20 MHz. Observations are taken 1/4 hourly.
---------- Films, tables
E ---------- Regular
VAILABLE AFTER ------ 2 MONTHS
---------- Tables, graphical plots
ED ---------- BOLETIM DE DADOS ASTROGEOFISICOS, in the form of printed reproduction of ionograms
---------- Yes

EST ---------- Yes
N ABOUT STATION ----- Divisao de Banco de Dados
Instituto de Pesquisas Espaciais (INPE)
Caixa Postal 515
Sao Jose dos Campos
Brazil SP

N ABOUT DATA -------- Same as above
--- Gaps in operation: 06/73-09/73, 02/74-09/74, 01/75-08/75.

ADDITIONAL COMMENTS ------

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BUENOS AIRES

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ITEM: 818
DATE:00/00/75

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	S 34.50
STATION LONGITUDE ----------	E 301.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	02/1950 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Ionosonde at 1-25 MHz
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Bulletins or reports
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. I. Mesterman Avenida del Libertador No. 327 Vicente Lopez Buenos Aires Argentina
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above

ADDITIONAL COMMENTS ------

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B01 Ionosphere

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CAMPBELL ISLAND
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ITEM: 79
DATE:28/07/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 52.60
STATION LONGITUDE	E 169.10
ALTERNATE NAMES	
DATES OF OPERATION	1944 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	J28 til 1950, C4 to present, 15 min h(f) vertical observations. American C4 ionosonde: 15 min observations with gain runs at the hours. 5 min observations on RWD.
RAW DATA	35 mm negative film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, puched paper tape
DATA ROUTINELY PUBLISHED	Ionosphere Data - Exchange or special request - limited mailing list. Hourly values of standard parameters.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Slough, Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Officer in Charge Geophysical Observatory P.O. Box 2111 Christchurch New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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CANBERRA
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ITEM: 84
DATE:31/03/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 35.31
STATION LONGITUDE	E 149.00
ALTERNATE NAMES	
DATES OF OPERATION	03/1937 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IPS type IIIC ionosonde; IPS type IVA (2/1975). Normal vertical incidence sounding every 15 min
RAW DATA	35 mm film for type IIIC ionoson 16 mm film for type IVA ionosond
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Table, computer printout
DATA ROUTINELY PUBLISHED	Australian ionospheric data comp ter listing, monthly; vertical incidence data.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Tokyo, Slough
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Assistant Secretary Ionospheric Prediction Service P.O. Box 702 Darlinghurst N.S.W. Australia 2010
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Type IVA ionosonde is undergoing trials at Canberr since 2/1975. It is expected to remain at Canberr and supercede type IIIC. Special purpose data usually available after 1 month.

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CAPE ZEVGARI
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ITEM: 87
DATE:02/07/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 34.58
STATION LONGITUDE	E 32.95
ALTERNATE NAMES	
DATES OF OPERATION	Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Union radio ionosonde. Vertical incidence sou

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Type IVA ionosonde is undergoing trials at Canberra since 2/1975. It is expected to remain at Canberra and supercede type IIIC. Special purpose data usually available after 1 month.

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CAPE ZEVGARI
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ITEM: 87
DATE:02/07/75 5a

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 34.58
STATION LONGITUDE ----------	E 32.95
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Union radio ionosonde. Vertical incidence soundins. Range 0.7-25 MHz. Linear frequency scale, 1000 km height scale. Peak pulse power 2 kW. Recordings hourly. No extra recordings on R.W.D.s.
RAW DATA ----------	35 m film
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Tables (daily worksheets)
DATA ROUTINELY PUBLISHED ----------	Published in bulletins, 4-8/1964, 1/1970 through 10/1972
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes Slough
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	World Data Centre C1 Science Research Council, Appleton La Ditton Park Slough England UK SL39JX
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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B01 Ionosphere

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CASEY
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ITEM: 89
DATE: 31/03/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 66.29
STATION LONGITUDE	E 110.53
ALTERNATE NAMES	Wilkes
DATES OF OPERATION	07/1967 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IPS type IIID ionosonde. Vertical ionosphere sounding. Routine soundings ever 15 minutes.
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	14 MONTHS
FORM OF REDUCED DATA	Tables, computer printout
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Tokyo, Slough
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Assistant Secretary Ionospheric Prediction Service P.O. Box 702 Darlinghurst N.S.W. Australia 2010
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	This station (Wilkes S66.25 E110.51) was operated by the USA until 1/1959 when it was handed over to Australia. It closed in 1/1969 when it was replaced by the new station at Casey.

re Vertical Soundings (Cont.)

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CHRISTCHURCH
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ITEM: 112
DATE:28/07/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 43.55
STATION LONGITUDE	E 172.75
ALTERNATE NAMES	Godley Head Lincoln
DATES OF OPERATION	10/1937 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	P2 ionosonde. 15 min hf records, vertical, 1-22 MHz, 1000 km. NZ designed and built ionosonde. Records on 35 mm film at 15 min interval with gain runs at quarter hours. On RWDs records at 5 min intervals. Sweep time 56 s.
RAW DATA	35 mm negative film, copies available on request for short runs
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, punched paper tape
DATA ROUTINELY PUBLISHED	IONOSPHERE DATA/exchange or special request/limited mailing list/hourly values of standard parameters.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Slough; Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Officer-in-Charge Geophysical Observatory P.O. Box 2111 Christchurch New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station formerly at Lincoln - no significant location change. Present equipment installed 1957; previously J28.

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B01 Ionosphere Ve

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CHUNG-LI
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ITEM: 113
DATE:01/12/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 24.95
STATION LONGITUDE	E 121.23
ALTERNATE NAMES	Taipei
DATES OF OPERATION	03/1960 to present 07/1965 station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	C2/C4 ionosonde. Observations scheduled according to IUWDS recommendation.
RAW DATA	Film, tables
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Hourly value tables, graphical plots
DATA ROUTINELY PUBLISHED	Detailed Values of Ionospheric Characteristics and f-Plots for Chung-Li
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Kokubunji, Japan
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Yinn-Nien Huang, Chief Telecommunication Laboratories, M.O.C. Dept Planning & Prog, PO Box 71 Chung Li Taiwan Republic of China
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose observations are usually available after 1 month. Station moved from N25.0 E121.5 to present location in 07/1965.

e Vertical Soundings (Cont.)

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CHURCHILL
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ITEM: 114
DATE:14/04/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 58.70
STATION LONGITUDE ---------- E 265.80
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1948 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 1005 W sounder, antenna 200 kc-2 MHz, multiple dipole, 3000 ft long; 2-20 MHz, double logaperiodic, 125 ft tower. Sounding schedule as Ottawa.
RAW DATA ---------- 35 mm film, Analog
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Magnetic tape, film, tables
DATA ROUTINELY PUBLISHED ---------- Canadian Ionospheric Data (monthly)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Churchill Ionospheric Station
P.O. Box 56
Fort Churchill Manitoba
Canada R0B 0K0

o.c.

ADDRESS FOR INFORMATION ABOUT DATA -------- Engineering Support Division
Department of Communications
1241 Clyde Avenue
Ottawa Ontario
Canada K25 IY3

ADDITIONAL COMMENTS ----- Special purpose data usually available after 1/2 month.

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CONCEPCION
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ITEM: 126
DATE:01/04/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- S 36.78
STATION LONGITUDE ---------- E 286.88
ALTERNATE NAMES ---------- IONCP
DATES OF OPERATION ---------- 11/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Vertical incidence sounding from 0.25 to 20 MHz every 30 min, except RWD every 15 minutes.
RAW DATA ---------- f-plot hourly data
DATA REDUCTION PRACTICE ---------- Regular

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CONCEPCION
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ITEM: 126
DATE:01/04/75 6

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- S 36.78
STATION LONGITUDE ---------- E 286.88
ALTERNATE NAMES ---------- IONCP
DATES OF OPERATION ---------- 11/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Vertical incidence sounding from 0.25 to 20 MHz every 30 min, except RWD every 15 minutes.
RAW DATA ---------- f-plot hourly data
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Tables, punched cards
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Harald Sagner
Dept. de Geofisica, Univ de Concepcion
Casilla 947
Concepcion
Chile

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data formerly published in IONOSPHERIC DATA (NOAA/EDS, US Dept of Commerce - no longer published).

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B01 Ionosphere V

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DAKAR
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ITEM: 131
DATE:20/01/76 6c

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 14.76
STATION LONGITUDE ----------	E 342.58
ALTERNATE NAMES ----------	Camberene
DATES OF OPERATION ----------	05/1949 to present Station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	C-4 Ionosonde. Ionograms every hour (and every 15 min on RWD).
RAW DATA ----------	35 mm film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Monthly tables of hourly values
DATA ROUTINELY PUBLISHED ----------	BULLETIN DE MESURES IONOSPHERIQUES
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Monsieur le Chef du Departement MIR C.N.E.T. Route de Tregastel Lannion France 22301
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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DE BILT
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ITEM: 141
DATE:15/05/75 6a

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings

Vertical Soundings (Cont.)

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DJIBOUTI
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ITEM: 148
DATE:09/03/76

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings	
STATION LATITUDE ----------	N 11.51	
STATION LONGITUDE ----------	E 42.83	
ALTERNATE NAMES ----------	Arta	
DATES OF OPERATION ----------	10/1951 to present	
OBSERVING SCHEDULE ----------	Regular	
INSTRUMENT DESCRIPTION -----	C4 Ionosonde.	Ionograms every 15 minutes.
RAW DATA ----------	35mm film	
DATA REDUCTION PRACTICE ----------	Regular	
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS	
FORM OF REDUCED DATA ----------	Monthly tables of hourly values	
DATA ROUTINELY PUBLISHED ----------	BULLETIN DE MESURES IONOSPHERIQUES	
DATA SENT TO WDC-A ----------	Yes	
DATA SENT TO WDC-B ----------	Yes	
DATA SENT TO WDC-C ----------	Yes	
DATA AVAILABLE ON REQUEST ----------		
ADDRESS FOR INFORMATION ABOUT STATION -----	Mon. l Ingenieur, charge du Dept M CNET Route de Tregastel Lannion France 22301	
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above	
ADDITIONAL COMMENTS -----		

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DOURBES
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ITEM: 152
DATE:02/02/76

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 50.10
STATION LONGITUDE ----------	E 4.60
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1957 to present
OBSERVING SCHEDULE ----------	Regular

ADDITIONAL COMMENTS -----

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DE BILT
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ITEM: 141
DATE:15/05/75

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 52.10
STATION LONGITUDE ----------	E 5.18
ALTERNATE NAMES ----------	Royal Netherlands Met Inst
DATES OF OPERATION ----------	11/1949 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Panoramic Ionosonde observations 1/2 hourly, only hourly observations are tabulated. Ionosonde developed and built in the Netherlands.
RAW DATA ----------	Film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	10 MONTHS
FORM OF REDUCED DATA ----------	Films, tables in monthly bulletin
DATA ROUTINELY PUBLISHED ----------	Royal Netherlands Meterological Institute, monthly bulletin of ionospheric and geomagnetic data
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Director, Division of Geophysics Royal Netherlands Meteorological Ins Utrechtse Weg De Bilt Netherlands
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Gap from 3/1967 until 10/1967 (included).

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ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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DOURBES
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ITEM: 152
DATE:02/02/76

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 50.10
STATION LONGITUDE ---------- E 4.60
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 07/1957 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Digisonde 128 and Panoramic ionosonde (Breisach). Ionosphere Vertical Soundings. Normal Ionograms every 15 minutes (on films, - Digital Ionograms every hour - Continuous recording of Ionospheric characteristics (ftE, h prime, MUF).

RAW DATA ---------- Film, digital ionograms on paper via Digicoder
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- Institut Royal Meteorologique de Belgique, Bulletin mensuel, observations ionospheriques et du rayonnement cosmique
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Pr. L. Bossy
Geophysique externe - Inst. Royal Me
3, avenue Circulaire
Bruxelles
Belgium 1180

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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B01 Ionosphe

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EBRO
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ITEM: 622
DATE:06/06/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 40.82
STATION LONGITUDE	E .49
ALTERNATE NAMES	Tortosa
DATES OF OPERATION	04/1955 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	French Ionosonde; from 7/1967 Swedish Magnetic AB Ionosonde, vertical soundings, normally one ionosonde per hour, occasionally more frequently.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	Boletin del Observatorio del Ebro (Ionosphera)
DATA SENT TO WDC-A	No
DATA SENT TO WDC-B	No
DATA SENT TO WDC-C	Yes Slough
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Observatorio del Ebro Roquetas Tarragona Spain
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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EL ARENOSILLO
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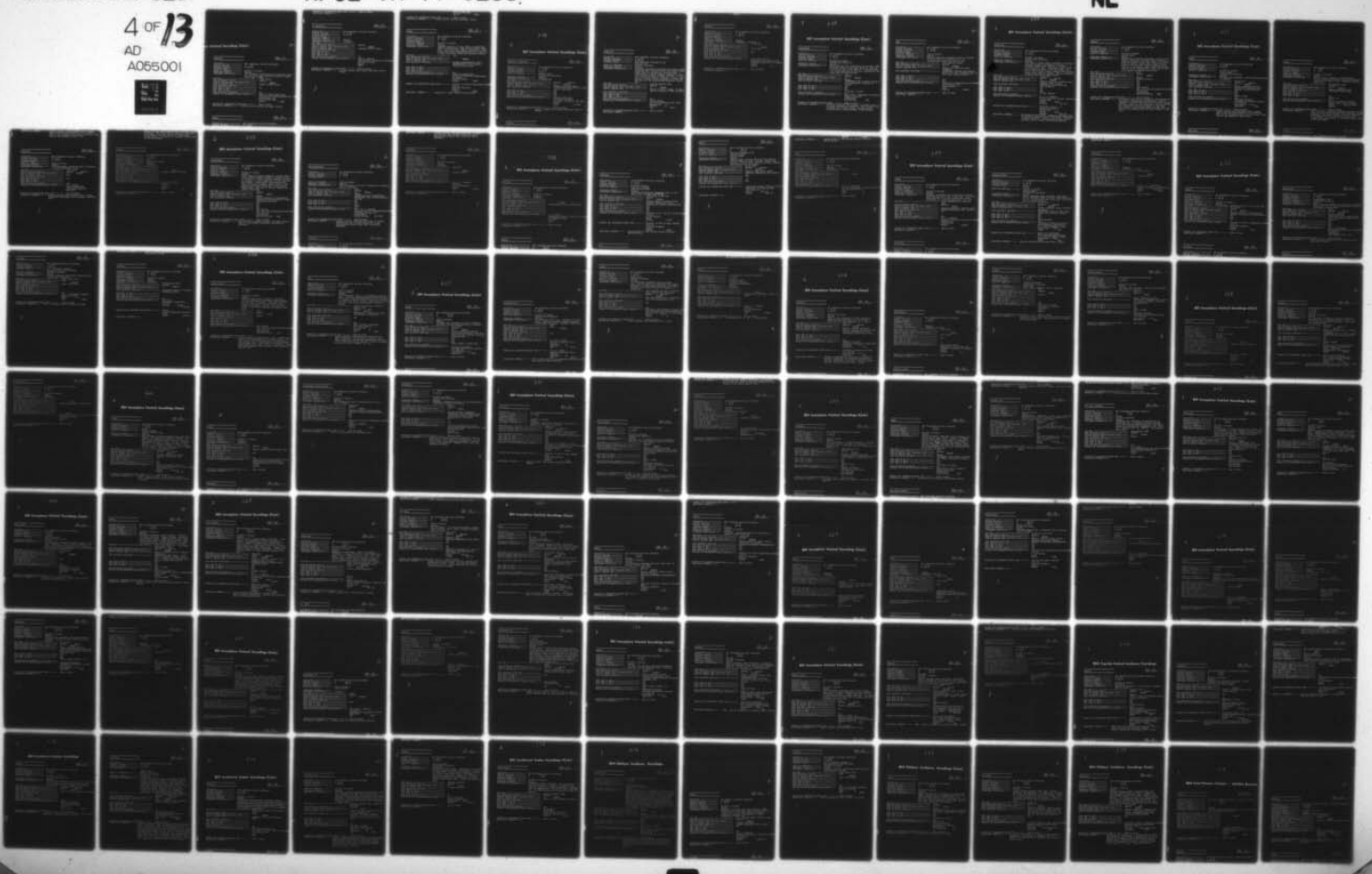
ITEM: 160
DATE:08/07/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings

AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

UNCLASSIFIED AFGL-TR-77-0255 NL

4 OF 13
AD
A055001



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FORTALEZA
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ITEM: 172
DATE:06/11/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 3.75
STATION LONGITUDE	E 321.05
ALTERNATE NAMES	
DATES OF OPERATION	08/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	C-4 ionosonde: Transmitting and receiving antennas are delta type, operating frequency sweeps from 1 MHz - 20 MHz.
RAW DATA	Film, tables
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, graphic plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Banco De Dados (Data Bank) Instituto de Pesquisas Espaciais (IN Caixa Postal 515 Sao Jose Dos CaSP Brasil 12200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Former station location was Natal, Brasil.

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GARCHY
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ITEM: 187
DATE:09/03/76

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 47.28

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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EL ARENOSILLO
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ITEM: 160
DATE:08/07/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 37.10
STATION LONGITUDE ---------- E 353.25
ALTERNATE NAMES ----------
DATES OF OPERATION ---------
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Ionosonde
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Graphical plots, tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Juan M. Cisneros
Inst Nacional de Tecnica Aeroespaci
Torrejon De Ardoz
Madrid
Spain

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data usually available after 3 months.

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Caixa Postal 515
Sao Jose Dos CaSP
Brasil 12200

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Former station location was Natal, Brasil.

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GARCHY
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ITEM: 187
DATE:09/03/76

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 47.28
STATION LONGITUDE ---------- E 3.07
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 10/1959 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Ionosonde magnetic AB type 1005W, 4 soundings/h (RWD 12 soundings/h); range 0.25-20.25MHz, power 25kW, recurrence 50Hz, impulse 70microsec, exploration 30s, double superheterodyne type, aperiodic power amplified, Delta and Trombone antennas.

RAW DATA ---------- Film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ---------- MESURES IONOSPHERIQUES RADIO-ELECTRIQUES C.N.E.T. Lannion (Cotes du Nord) 22301
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Station Ionospherique
Centre de Recherches Geophysiques de Garchy
Pouilly s/Loire
France 58150

ADDRESS FOR INFORMATION ABOUT DATA -------- Monsieur le Chef du Departement TMA/MI
C.N.E.T
Route de Tregastel
Lannion
France 22301
ADDITIONAL COMMENTS ----- Ionograms no longer reduced since 03/1974.

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B01 Ionosphere Vertical Soundings (Cont.)

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GENOVA-MT. CAPELLINO
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ITEM: 491
DATE:13/03/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 44.60
STATION LONGITUDE	E 9.00
ALTERNATE NAMES	B-236
DATES OF OPERATION	Station moved Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Digisonde 128
RAW DATA	
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	IONOSPHERIC ANNUAL BULLETIN (Genova-Mt. Capellino)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Istituto Geofisico Universita di Genova Via Balbi, 30-23-P.O. Box 3145 Genova Italy I-16100
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data usually available after 12 months.

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GODHAVN
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ITEM: 729
DATE:00/00/75

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GOOSE BAY
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ITEM: 208
DATE:31/03/75 9a

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 53.32
STATION LONGITUDE ----------	E 299.54
ALTERNATE NAMES ----------	AFGL Goose Bay Ionospheric Obs Melville AFB
DATES OF OPERATION ---------	01/1972 to present
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Digisonde 128 digital ionospheric sounder, linear frequency scan, minimum step 25 kHz, phase coded, phase coherent integration, optional power integration, 10 kW pp Granger transmitter, 180 foot vertical rhombic transmit antenna, 3 circularly polarized receiver antennas. Routine operations - quarter hourly ionograms 0-12 MHz, 100 kHz delta f, 320 integrations/frequency, 200 Hz PRF.
RAW DATA ----------	Digital magnetic tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	6 MONTHS
FORM OF REDUCED DATA ----------	Tables of hourly values, 15 ionospheric parameters (URSI Standard)
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Jurgen Buchau Air Force Geophysics Lab (LIB) Hanscom AFB Bedford MA USA 01731
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

months.

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GODHAVN
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ITEM: 729
DATE:00/00/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 69.30
STATION LONGITUDE	E 306.50
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde, 1.6-20 MHz
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	35 mm film
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Viggo Neble Jensen Ionosphere Lab, Building 349 Technical University of Denmark Lyngby Denmark DK
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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B01 Ionosphere Vertical Soundings (Cont.)

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GRAHAMSTOWN
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ITEM: 212
DATE:12/03/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 33.27
STATION LONGITUDE	E 26.53
ALTERNATE NAMES	
DATES OF OPERATION	03/1958 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Barry Research VOS 1 Vertichirp, 0.5-15 MHz, 1000 km height range, sweep range 50 kHz/s, sweep duration 4 min 50 s, peak power 8 W, average power 3 W, sweep commences on the hour, equivalent 3 dB pulse width 30 microseconds.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	IONOSPHERIC DATA, monthly bulletin for Grahamstown, available on request
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes C1 Slough, C2 Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Data Centre, Department of Physics Rhodes University Grahamstown South Africa 6140
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Regularly scheduled data normally available after 1-12 months depending on staffing. Data bulletins are available for 1/3/58-31/8/58, 3/9/58-31/12/58, 3/1/59-22/2/59, 2/1965-12/1965, 7/1972-present.

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GRAZ
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ITEM: 214
DATE:14/03/75 9c

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 47.10
STATION LONGITUDE ----------	E 15.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1947 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Special production ionosonde, hourly ionograms on 16 mm film, 2.5-12 MHz in 50 s, on International World Days every 15 min.
RAW DATA ----------	Film, monthly tables
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables, foF graphical plots (monthly)
DATA ROUTINELY PUBLISHED ----------	IONOSPHERIC STATION GRAZ/AUSTRIA hourly foF2 data, monthly means of foE, foF1, virtual heights
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Institut fur Meteorologie und Geophys University of Graz Halbarthgasse 1 Graz Austria A-8010
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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B01 Ionosphere Vertical Soundings (Cont.)

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HALLEY BAY
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ITEM: 227
DATE:20/06/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 75.52
STATION LONGITUDE	E 333.37
ALTERNATE NAMES	
DATES OF OPERATION	04/1957 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	DSIR Mark II (Union Radio) Ionosonde, ionosonde vertical incidence soundings 1/4 hourly. Expanded height scale (300 km) to 3 MHz on 1/2 h, gain runs at hour. Frequency range 0.65-15 MHz, sweep time about 4 min, peak power 1 kW, P.R.F. 50 Hz, pulse length normally 100 microsec, height range 1000 km (normal), 300 km (expanded), antennas terminated folded dipoles.
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	13 MONTHS
FORM OF REDUCED DATA	Computer printout, punched cards, magnetic tape, f-plots
DATA ROUTINELY PUBLISHED	IONOSPHERIC DATA-HALLEY BAY pub. of WDC-C1
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Slough, England
ADDRESS FOR INFORMATION ABOUT STATION	Dr. J. R. Dudeney British Antarctic Survey, Appleton La Ditton Park Slough Bucks England SL3 9JX
ADDRESS FOR INFORMATION ABOUT DATA	World Data Centre - C1 Appleton Laboratory Ditton Park Slough Bucks England SL3 9JX
ADDITIONAL COMMENTS	No operation during 1959. Regularly scheduled data are normally available after 8-18 months (processed in yearly batches). Special purpose data usually available after 1 month (selected parameters).

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HERMANUS

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ITEM: 244

DATE:23/04/75 10a

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	S 34.42
STATION LONGITUDE ----------	E 19.23
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1949 to present Station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Wadley Swept Frequency Ionosonde, routine ionospheric recording, frequency sweep 0-20 MHz, in practice limited to 1-15 MHz, upper limit determined by sunspot number, power output approximately 1 kW, vertical rhombic antennas, sweep time 15 s, PRF 50 pps, pulse length 70 microsec, routine 15 min observations, 5 min runs on special request and Regular World Days.
RAW DATA ----------	Film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	Monthly Bulletin
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	The Director Natl Inst for Telecommunications Res PO Box 3718 Johannesburg Rep of So Africa 2000
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	The Monthly Bulletin of Ionospheric Characteristics Recorded at Johannesburg and Hermanus is mailed regularly to listed institutions as the data becomes available. Apply to the Institute to receive copies. The ionosonde originally operated at Cape Town S34.13 E18.31 from January 1949 to 10 May 1971. It was moved to Hermanus and recording resumed 13 May 1971.

B01 Ionosphere Vertical Soundings (Cont.)

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HOBART
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ITEM: 262
DATE:31/03/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- S 42.91
STATION LONGITUDE ---------- E 147.31
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 12/1945 to present
Station moved
Intermittent operation
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- IPS Type IIIE ionosonde, routine soundings every 15 minutes.

RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer printout
DATA ROUTINELY PUBLISHED ---------- Australian ionospheric data computer listing (monthly)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Tokyo; Slough
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Assistant Secretary
Ionospheric Prediction Service
P.O. Box 702
Darlinghurst N.S.W.
Australia 2010

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 1 month. Hobart station was destroyed by fire 29/05/59. Most of the ionograms were lost in the fire. The station was reopened in April 1961.

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HONG KONG
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ITEM: 264
DATE:20/06/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings

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IBADAN
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ITEM: 275
DATE:28/10/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 7.40
STATION LONGITUDE	E 3.90
ALTERNATE NAMES	
DATES OF OPERATION	12/1951 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Mark IV Union Ionosonde, 1 kW peak power 80-330 microsec pulse width covering frequency range 0.67-25 MHz in 5 min, ionograms produced every hour.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	IONOSPHERIC DATA IBADAN
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Slough, UK
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Ibadan Ionospheric Station Physics Dept, Univ of Ibadan Ibadan Western State Nigeria
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Other vertical ionospheric sounders available at the station are the C2/4 ionosonde and a portable cossor ionosonde. The former has not started to function. It is hoped to use the latter at a later date (around 1976) in Jos which is a station almost right on the dip equator.

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IRKUTSK
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ITEM: 361
DATE:00/00/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 52.47

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 1 month. Hobart station was destroyed by fire 29/05/59. Most of the ionograms were lost in the fire. The station was reopened in April 1961.

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HONG KONG
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ITEM: 264
DATE:20/06/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 22.33
STATION LONGITUDE ---------- E 114.20
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1969 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- C-2/4 Ionosonde, soundings every 15 minutes, 1-20 MHz, peak power 10 kW.
RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Film
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- G. O. Walker
Physics Department
Hong Kong University
Hong Kong

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 1 month. Overhauled replacement C2/4 ionosonde installed 1974.

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ADDITIONAL COMMENTS ------ Other vertical ionospheric sounders available at this station are the C2/4 ionosonde and a portable cossor ionosonde. The former has not started to function. It is hoped to use the latter at a later date (around 1976) in Jos which is a station almost right on the dip equator.

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IRKUTSK
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ITEM: 861
DATE:00/00/75 // a

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 52.47
STATION LONGITUDE ----------	E 104.03
ALTERNATE NAMES ----------	Zui
DATES OF OPERATION ----------	01/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Ionosonde
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter, bulletins
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. N. M. Erofeev SibIZMIR P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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1 152

B01 Ionosphere Vertical Soundings (Cont.)

****
JOHANNESBURG
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ITEM: 287
DATE:23/04/75 11b

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 26.10
STATION LONGITUDE	E 28.10
ALTERNATE NAMES	
DATES OF OPERATION	06/1947 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Wadley swept frequency ionosonde, routine recordings, frequency sweep 0-20MHz, in practice this is limited to 1-15MHz, maximum frequency adjusted as necessary to keep capability in line with sunspot number. Power output approximately 1kW, vertical rhombic antennas, sweep time 45s, PRF 50pps, pulse length 70microsec, routine 15min observations, 5min runs on special request and Regular World Days.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	Monthly Bulletin of Ionospheric Characteristics Recorded at Johannesburg and Hermanus
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	The Director Natl Inst for Telecommunications Res P.O. Box 3718 Johannesburg Rep of So Africa 2000
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data Bulletins--regular mailings to listed institutions as data becomes available, published by institute.

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JULIUSRUH/RUGEN
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ITEM: 288
DATE:11/08/75 //c

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 54.63
STATION LONGITUDE ---------- E 13.38
ALTERNATE NAMES ----------

DATES OF OPERATION --------- 1954 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- SP-3 ionosonde, 0.2-2 MHz, ionograms at quarterly hourly intervals.
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 0.5 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- GEOPHYSIKALISCHE BEOBACHTUNGS-ERGEBNISSE, Akad d Wissenschaften der DDR
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Tokyo
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. Dr. K. Sprenger
Observatorium fur Ionospharenforschu
Mitschurin Strasse 4-6
Kuhlungsborn
German Dem Rep DDR 2565

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Monthly bulletin available from Adad. d. Wissenschaften der DDR, Zentralinstitut fur solar-terrestrische Physik (HHI), DDR 1199 Berlin-Adlershof.

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KALINGRAD
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ITEM: 854
DATE:00/00/75 //d

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 54.70
STATION LONGITUDE ---------- E 20.62

ADDITIONAL COMMENTS ----- Monthly bulletin available from Adad. d. Wissenschaften der DDR, Zentralinstitut fur solar-terrestrische Physik (HHI), DDR 1199 Berlin-Adlershof.

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KALINGRAD
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ITEM: 854
DATE:00/00/75 11d

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 54.70
STATION LONGITUDE ---------- E 20.62
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 02/1964 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Ionosonde
RAW DATA ---------- Microfilm
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. R. A. Zevakina
IZMIRAN
P/O Akademgorodok
Moscow
USSR 149092

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS -----

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153

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B01 Ionosphere Vertical Soundings (Cont.)

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KARAGANDA
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ITEM: 835
DATE:00/00/75 / 2a

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 49.81
STATION LONGITUDE ----------	E 73.08
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	08/1964 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Ionosonde
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Photographic prints, black/white
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	M. P. Rudina Ionospheric Section, Acad Sci of Kaz S 68 Kamenskoe Plato Alma-Ata USSR
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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KENORA
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ITEM: 671
DATE:14/04/75 12 b

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 49.79
STATION LONGITUDE ----------	E 265.51

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KERGUELEN
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ITEM: 302
DATE:27/01/76 12c

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 49.35
STATION LONGITUDE	E 70.24
ALTERNATE NAMES	Port aux Francais
DATES OF OPERATION	02/1953 to present 1964 station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde Magnetic AB, ionograms every 15 min., every 5 min. on RWD, 0.25-20 MHz.
RAW DATA	35 mm film, 16 mm film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Monthly tables of hourly values, magnetic tape since 9/1970
DATA ROUTINELY PUBLISHED	BULLETIN DE MESURES IONOSPHERIQUES
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Monsieur le Dir. des Lab. Scientifique T.A.A.F. 27 rue Oudinot Paris France 75700
ADDRESS FOR INFORMATION ABOUT DATA	Monsieur le Chef du Dept. TMA/MIR C.N.E.T. Route de Tregastel Lannion France 22301
ADDITIONAL COMMENTS	Station moved in 1964 (former station location S49.30 E70.50).

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KIEV
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ITEM: 850
DATE:00/00/75 12d

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KENORA

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ITEM: 671

DATE:14/04/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings

STATION LATITUDE ---------- N 49.79

STATION LONGITUDE ---------- E 265.51

ALTERNATE NAMES ---------- Winnipeg Ionospheric Stn

DATES OF OPERATION ---------- 1948 to present
Station moved

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- 1005W sounder, antenna 250 kHz-2 MHz multiple dipole, 1800 feet long, 2-20 MHz, double log-periodic, 150 ft tower, located in valley; sounding schedule same as Ottawa.

RAW DATA ---------- 35 mm film

DATA REDUCTION PRACTICE ---------- Regular , Special

REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS

FORM OF REDUCED DATA ---------- Magnetic tape, film, tables

DATA ROUTINELY PUBLISHED ---------- CANADIAN IONOSPHERIC DATA (monthly)

DATA SENT TO WDC-A ---------- Yes

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ---------- Yes

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION -----

ADDRESS FOR INFORMATION ABOUT DATA --------

Engineering Support Division (D.O.C.)
Department of Communications
1241 Clyde Ave
Ottawa Ontario
Canada K2C 1Y3

ADDITIONAL COMMENTS -----

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Lannion
France 22301

ADDITIONAL COMMENTS ----- Station moved in 1964 (former station location S49.30 E70.50).

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KIEV
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ITEM: 850
DATE:00/00/75 12d

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 50.72
STATION LONGITUDE ---------- E 30.30
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1960 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Ionosonde at 1-18 MHz
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. A. K. Yukhimuk
Inst of Geophysics, Ukranian Acad of Sc
32, Polladin Avenue
Kiev
USSR 68

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS -----

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B01 Ionosphere Vertical Soundings (Cont.)

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KIRUNA
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ITEM: 312
DATE:21/04/75 13a

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 67.80
STATION LONGITUDE	E 20.40
ALTERNATE NAMES	
DATES OF OPERATION	10/1948 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Panoramic Ionosonde, own construction, regular soundings every 1/2 hour, 3 gain runs 0.6-15 MHz, sweep duration 30 s, film recordings, height recordings on 2 fixed frequencies 3 and 7 MHz.
RAW DATA	Film, punched cards, magnetic tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Computer printouts, monthly report
DATA ROUTINELY PUBLISHED	KIRUNA IONOSPHERIC DATA, monthly
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. R. Lindquist Research Institute of National Defenc Section 346 Stockholm 80 Sweden S10450
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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KODAIKANAL
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ITEM: 765
DATE:00/00/75 13 1

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 10.20
STATION LONGITUDE	E 77.50

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KOKUBUNJI/TOKYO
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ITEM: 324
DATE:20/03/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 35.71
STATION LONGITUDE	E 139.49
ALTERNATE NAMES	Tokyo TO 535
DATES OF OPERATION	04/1943 to present Station moved Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Type 8 (Japanese made) ionosonde, peak power 10 kW, frequency sweep 1-20 MHz, observations at 00, 15, 30 and 45 min past every hour, 35 mm film with 10 cm/observation.
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED	IONOSPHERIC DATA IN JAPAN (RRL), monthly with tables, f-plots
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes United Kingdom
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Ionospheric Prediction Service Radio Research Laboratories 2-1, Nukui-Kitamachi 4-chome Koganei-shi Tokyo Japan 184
ADDRESS FOR INFORMATION ABOUT DATA	WDC-C2 for Ionosphere Radio Research Laboratories 2-1, Nukui-Kitamachi 4-chome Koganei-shi Tokyo Japan 184
ADDITIONAL COMMENTS	Special purpose data available after 1 month.

ADDRESS FOR INFORMATION ABOUT DATA
ADDITIONAL COMMENTS -----

154

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KODAIKANAL
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ITEM: 765
DATE:00/00/75

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 10.20
STATION LONGITUDE ----------	E 77.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Ionosonde, 1-25 MHz
RAW DATA ----------	Strip charts
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. J. C. Bhattacharya Indian Institute of Astrophysics Hebbal Bangalore India 560006
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above

ADDITIONAL COMMENTS ------

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B01 Ionosphere Vertical Soundings (Cont.)

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LANNION
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ITEM: 327
DATE:17/02/76 132

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 48.75
STATION LONGITUDE ---------- E 356.55
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1971 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- C4 Ionosonde, ionograms every 15 min (1.2-17 MHz)
RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Monthly tables of hourly values
DATA ROUTINELY PUBLISHED ---------- Bulletin de mesures ionospheriques
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Monsieur le chef du Departement TMA/MIR
C.N.E.T.
Route de Tregastel
Lannion
France 223-1

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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LA POSTA
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ITEM: 986
DATE:15/05/75 140

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 32.40
STATION LONGITUDE ---------- E 243.50

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LINDAU/HARZ
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ITEM: 348
DATE:05/03/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 51.65
STATION LONGITUDE	E 10.12
ALTERNATE NAMES	Lindau/Harz B 103
DATES OF OPERATION	01/01/1948 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	DDl-6, Vertical Soundings, logarithmic frequency range from 1 to 16 MHz, peak pulse power 70 kW, half-hourly observations.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Monthly booklets
DATA ROUTINELY PUBLISHED	IONOSPHERIC DATA, monthly booklets, available through the Institute
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. G. Lange-Hesse Max-Planck-Institut fur Aeronomie Postfach 20 Lindau/Harz West Germany (FRG) 3411
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose observations are usually available after 2 months.

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LYCKSELE
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ITEM: 368
DATE:18/02/76

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LA POSTA
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ITEM: 986
DATE:15/05/75

140

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 32.40
STATION LONGITUDE	E 243.50
ALTERNATE NAMES	OL C, 12 Weather Squadron Navy Electronic Lab Cen (NELC)
DATES OF OPERATION	10/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Oblique ionosonde, observatory operates daily from sunrise to sunset
RAW DATA	Logs, chart rolls
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Logs, chart rolls
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	OL C, 12th Weather Squadron Route 1, Box 591 Campo CA USA 92006
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data are regularly sent to NELC, San Diego.

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ADDITIONAL COMMENTS ----- Special purpose observations are usually available after 2 months.

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LYCKSELE
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ITEM: 368
DATE:18/02/76 / 4

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 64.62
STATION LONGITUDE ---------- E 18.67
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 01/1970 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Ionosonde
RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ---------- Published monthly in LYCKSELE IONOSPHERIC DATA
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Ove Klang
Ionospheric Observatory
Box 100
Lycksele Sweden
S-92100

ADDRESS FOR INFORMATION ABOUT DATA -------- Library
Kiruna Geophysical Institute
Kiruna
Sweden S-981 01

ADDITIONAL COMMENTS -----

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B01 Ionosphere Vertical Soundings (Cont.)

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MARION ISLAND
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ITEM: 391
DATE:23/04/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 46.85
STATION LONGITUDE	E 37.87
ALTERNATE NAMES	
DATES OF OPERATION	01/1974 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Modified Wadley swept frequency ionosonde, routine ionospheric recordings, sweep frequency 1-15 MHz, 1 kW output. Vertical delta antennas, sweep time 15 s, PRF 50 pps, pulse length 70 microsec, routine 15 min observations, 5 min runs on request and Regular World Days.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	The Director Natl Inst for Telecommunications Res P.O. Box 3718 Johannesburg Rep of So Africa 2000
ADDRESS FOR INFORMATION ABOUT DATA	
ADDITIONAL COMMENTS	Marion Island is relieved once a year, around April. Data will be published after operators return. It will be sent to all recipients of the Johannesburg and Hermanus data. Considerable difficulties were experienced in the first 2 years of operation. Good data were expected to be available from the beginning of 1974.

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MAUI
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ITEM: 393
DATE:18/02/75 15a

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 20.83
STATION LONGITUDE ---------- E 203.53
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1943 to present
Station moved
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ C2/C4 Ionosonde, NBS 8, all ionospheric parameters. Vertical incidence sounder operating every 15 minutes. Samples ionosphere for 30 s, sweeping from 0.25 MHz to 20 MHz. Ionograms are on 35 mm film, each frame approximately 4 inches in length.

RAW DATA ---------- Daily hourly values, summary Sheets, film
DATA REDUCTION PRACTICE ---------- Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------- 1/30 MONTHS
FORM OF REDUCED DATA ---------- Photographic, monthly and daily tabulations of parameters
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ NOAA, US Dept of Commerce
Maui Field Station
P.O. Box 578
Puunene HI
USA 96784

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Special purpose observations are usually available immediately. Daily hourly values of ionosphere soundings and Monthly Summary sheet of foF2 and F2 M3000 are kept at station. Films, originals are sent to WDC-A, Boulder, CO, USA.

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B01 Ionosphere Vertical Soundings (Cont.)

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MAWSON
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ITEM: 689
DATE:31/03/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 67.60
STATION LONGITUDE	E 62.88
ALTERNATE NAMES	
DATES OF OPERATION	1959 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IPS Type IIIE ionosonde, vertical ionosphere sounding, routine soundings every 15 minutes
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	14 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	Australian ionospheric data computer listing, monthly, vertical incidence data
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Tokyo (Japan), Slough (UK)
ADDRESS FOR INFORMATION ABOUT STATION	Assistant Secretary Ionospheric Prediction Service P.O. Box 702 Darlinghurst N.S.W. Australia 2010
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MEXICO

ITEM: 401
DATE:20/03/75

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MILLSTONE HILL

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ITEM: 403

DATE: 25/08/75 152

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 42.61
STATION LONGITUDE ---------- E 288.51
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1963 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ C-4 ionosonde until 1971. Presently 128 Digisonde. Vertical incidence sounder operates at 30 minute intervals. Records on 35mm film.

RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------

Dr. Joh V. Evans
Lincoln Laboratory M.I.T.
Wood St.
Lexington MA
USA 02173

ADDRESS FOR INFORMATION ABOUT DATA ---------

Mr. W. A. Reid
Lincoln Laboratory M.I.T.
Wood St.
Lexington MA
USA 02173

ADDITIONAL COMMENTS ------ Gaps in data exist due to equipment malfunctions but are usually of short duration.

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ITEM: 852

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MEXICO

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ITEM: 401

DATE: 20/03/75

150

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 19.43
STATION LONGITUDE	E 260.30
ALTERNATE NAMES	Mexico City
DATES OF OPERATION	04/1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	C-4 ionosonde, Ionosphere Vertical Soundings. The C-4 works two times each hour (0000 and 0030) all days except Saturdays and Sundays because of free days of week and superior instructions.
RAW DATA	The ionograms are sent to Boulder after scaling and computing.
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	The reduced data are in accordance with the international rules.
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	DGT-Subdir Gen Permisos y Asuntos Intl Dept de Frecuencias Radioelectricas Nino Perdido y Cumbres de Acultzingo Mexico D.F. Mexico 12
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 1 month.

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are usually of short duration.

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MOSCOW

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ITEM: 852

DATE: 00/00/75 16a

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 55.47
STATION LONGITUDE	E 37.32
ALTERNATE NAMES	Krasnaya Pakhra
DATES OF OPERATION	03/1944 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Photographic negatives, black and white
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. N. P. Benkova IZMIRAN P/O Akademgorodok Moscow USSR 149092
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	CO-investigator: Dr. Yu. V. Kushnerevskij

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B01 Ionosphere Vertical Soundings (Cont.)

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MUNDARING
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ITEM: 419
DATE: 21/06/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 31.98
STATION LONGITUDE	E 116.21
ALTERNATE NAMES	
DATES OF OPERATION	04/1959 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Model 3E IPS ionosonde, vertical soundings, quarter hourly soundings, 1.0 to 20 MHz; until Feb 1970 the instrument was a Cossar.
RAW DATA	35mm film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	Monthly computer listings of Australian Ionospheric Data by Ionospheric Prediction Service.
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Observer in Charge Mundaring Geophysical Observatory Mundaring W.A. Australia 6073
ADDRESS FOR INFORMATION ABOUT DATA	Ionospheric Prediction Service P.O. Box 702 Darlinghurst N.S.W. Australia 2010
ADDITIONAL COMMENTS	Station is operated by the Bureau of Mineral Resources, Mundaring, for Ionospheric Prediction Service, Department of Science. Special purpose data are usually available after 1 month.

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ITEM: 427

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NARSSARSSUAQ
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ITEM: 727
DATE:00/00/75 162

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 61.20
STATION LONGITUDE ----------	E 314.60
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Ionosonde, 1-25 MHz
RAW DATA ----------	35 mm film
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	35 mm film
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Viggo Neble Jensen Ionosphere Lab, Building 349 Technical University of Denmark Lyngby Denmark DK
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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NORFOLK ISLAND
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ITEM: 442
DATE:31/03/75 170

DISCIPLINE ----------	**B01 Ionosphere Vertical Soundings**

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NAIROBI

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ITEM: 427

DATE: 30/01/76

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings

STATION LATITUDE ---------- S 1.28

STATION LONGITUDE ---------- E 36.83

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 01/1964 to present
Intermittent operation

OBSERVING SCHEDULE ---------- Occasional

INSTRUMENT DESCRIPTION ------ Union Radio Ionosonde, hourly ionograms

RAW DATA ---------- Film

DATA REDUCTION PRACTICE ---------- Regular

REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS

FORM OF REDUCED DATA ---------- Tables

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. N. J. Skinner
University of Nairobi
Box 30197
Nairobi
Kenya

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above

ADDITIONAL COMMENTS ------ Operation fairly consistent from 01/1964 to 03/1974 though with some gaps. Later records not reduced on routine basis.

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NORFOLK ISLAND
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ITEM: 442
DATE: 31/03/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 29.03
STATION LONGITUDE	E 167.97
ALTERNATE NAMES	
DATES OF OPERATION	02/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IPS type IIID ionosonde, routine vertical soundings every 15 minutes.
RAW DATA	35mm film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Table, computer printout
DATA ROUTINELY PUBLISHED	Australian ionospheric data computer listing, monthly; vertical incidence data
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Tokyo; Slough
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Assistant Secretary Ionospheric Prediction Service P.O. Box 702 Darlinghurst N.S.W. Australia 2010
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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B01 Ionosphere Vertical Soundings (Cont.)

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NORILSK
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ITEM: 863
DATE:00/00/75 17b

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 69.00
STATION LONGITUDE	E 88.00
ALTERNATE NAMES	
DATES OF OPERATION	01/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter, bulletins
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. N. M. Erofeev SibIZMIR P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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NOVOKAZALINSK

ITEM: 833
DATE:00/00/75 17c

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OKINAWA
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ITEM: 446
DATE: 20/03/75 172

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 26.32
STATION LONGITUDE	E 127.78
ALTERNATE NAMES	OK, 426
DATES OF OPERATION	06/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	C-3 Ionosonde, Ionospheric Vertical Soundings, Peak power 10 kW, frequency sweep 1-20 MHz. 00, 15, 30, and 45 min past every hour. 35mm film: 10 cm/observation
RAW DATA	35mm film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED	IONOSPHERIC DATA IN JAPAN, issued monthly by RRL, tables, f-plots
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes United Kingdom
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Okinawa Radio Wave Observatory Radio Research Laboratories Tobaru, Chatanson Nakagami-gun Okinawa-ken Japan 904-01
ADDRESS FOR INFORMATION ABOUT DATA	WDC-C2 for Ionosphere Radio Research Laboratories 2-1, Nukui-Kitamachi 4-chome Koganei-shi Tokyo Japan 184
ADDITIONAL COMMENTS	From 05/1946-06/1972 station operated by USA. INAG. Special purpose data available after 1 month.

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NOVOKAZALINSK
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ITEM: 833
DATE:00/00/75 17c

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 45.76
STATION LONGITUDE	E 62.12
ALTERNATE NAMES	
DATES OF OPERATION	03/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Photographic prints, black/white
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	M. P. Rudina Ionospheric Section, Acad Sci of Kaz SS 68 Kamenskoe Plato Alma-Ata USSR
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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B01 Ionosphere Vertical Soundings (Cont.)

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OTTAWA
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ITEM: 449
DATE:14/04/75 18a

DISCIPLINE ----------	BØ1 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 76.1Ø
STATION LONGITUDE ----------	E 45.15
ALTERNATE NAMES ----------	Ashton
DATES OF OPERATION ----------	1948 to present Station moved in 1972
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	WWSC schedule (6 hourly observations) plus ISIS B passes. J5 Magnetic AB Sounder - Antenna, 200 kHz - 2 MHz, multiple dipole 3000 ft long; 2-20 MHz Double Log Periodic 325 ft tower. Sounding schedule 00 minutes - medium rcvr gain Ø1 min - low gain; 15- manually adjusted; 30 min - ditto; 45 min - ditto; 59 min = high gain. ISIS-B passes - 1 per minute - horizon to horizon.
RAW DATA ----------	Film analogue
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Magnetic tape, film, tables
DATA ROUTINELY PUBLISHED ----------	CANADIAN IONOSPHERIC DATA
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Ottawa Ionospheric Station Engineering Support Div. (Dept. Comm. 1241 Clyde Ave. Ottawa Ontario Canada K2C 1Y3
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Former location 45.4N, 75.9W, station moved in 1972. Special purpose data usually available after 1/2 month.

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OVEJUVO
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ITEM: 454
DATE:21/01/76 18C

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- S 16.00
STATION LONGITUDE ---------- E 291.00
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1976 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Ionosonde
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 4 MONTHS
FORM OF REDUCED DATA ---------- Tabular matter, punched paper tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Instituto de Investigaciones Fisicas
Laboratorio de Fisica Cosmica
Universidad Mayor de San Andres
La Paz
Bolivia

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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PARAMARIBO
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ITEM: 457
DATE:15/05/75 182

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 5.82

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OUAGADOUGOU (HAUTE VOLTA)
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ITEM: 452
DATE: 17/02/76 18h.

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 12.37
STATION LONGITUDE ---------- E 358.47
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 05/1966 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- CNR Ionosonde SP 35/16, Ionograms every 15 min (1.2 - 17 MHz).
RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Monthly tables of hourly values
DATA ROUTINELY PUBLISHED ---------- BULLETIN DE MESURE IONOSPHERIQUES
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Monsieur le Chef du Departement TMA/MIR
CNET
Route de Tregastel
Lannion
France 22301

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Station closed August and September 1975.

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PARAMARIBO

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ITEM: 457

DATE:15/05/75 182

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings

STATION LATITUDE ---------- N 5.82

STATION LONGITUDE ---------- E 304.78

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 05/1965 to present
Intermittent operation

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- Panoramic ionosonde developed in the Netherlands, 1.0-18 MHz, hourly observations.

RAW DATA ---------- Films

DATA REDUCTION PRACTICE ---------- Regular

REGULAR REDUCED DATA AVAILABLE AFTER ------ 10 MONTHS

FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ---------- Monthly bulletin PARAMARIBO IONOSPHERIC AND GEOMAGNETIC DATA (Published by Royal Netherlands Meteorological Institute)

DATA SENT TO WDC-A ---------- Yes

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ---------- Yes

DATA AVAILABLE ON REQUEST ----------

ADDRESS FOR INFORMATION ABOUT STATION ------ Director Geophysical Division
Royal Netherlands Meteorological Inst.
Utrechtseweg 297
De Bilt
Netherlands

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above

ADDITIONAL COMMENTS ----- Observations are not always of sufficient quality and there are many gaps in the continuity. At the moment there is an important arrearage in the scaling of the ionograms. November 1970 is the last published bulletin.

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B01 Ionosphere Vertical Soundings (Cont.)

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POITIERS
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ITEM: 464
DATE: 02/02/76 19

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 46.57
STATION LONGITUDE	E .35
ALTERNATE NAMES	
DATES OF OPERATION	07/1948 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde. Ionograms every hour (or every 15 minutes on RWD) (1.6 - 17 MHz).
RAW DATA	35mm film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Monthly tables of hourly values (& magnetic tape since 1971)
DATA ROUTINELY PUBLISHED	BULLETIN DE MESURES IONOSPHERIQUES
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Monsieur le Professeur Rivault Laboratoire de Physique de la Haute Atm 40 avenue du Recteur Pineau Poitiers Cedex France 86022
ADDRESS FOR INFORMATION ABOUT DATA	Monsieur le Chef du dept TMA/MIR CNET route de Tregastel Lannion France 22301
ADDITIONAL COMMENTS	Special purpose data usually available after 3 months.

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PORT MORESBY

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ITEM: 471
DATE:07/04/75 19 b

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- S 9.41
STATION LONGITUDE ---------- E 147.15
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 05/1961 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- IPS Type III E ionosonde, vertical ionospheric sounding, routine soundings every 15 minutes.
RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer printouts
DATA ROUTINELY PUBLISHED ---------- Australian ionospheric data computer listing, monthly vertical incidence data
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Tokyo; Slough
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Assistant Secretary
Ionospheric Prediction Service
P.O. Box 702
Darlinghurst N.S.W.
Australia 2010

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ----- Station has been temporarily closed since 08/1972. It is hoped to install a type IVA ionosonde at this station in the latter half of 1975.

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PRUHONICE

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ITEM: 821
DATE:00/00/75 19 c

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ----- Station has been temporarily closed since 08/1972.
It is hoped to install a type IVA ionosonde at this station in the latter half of 1975.

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PRUHONICE
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ITEM: 821
DATE:00/00/75 19C

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 50.00
STATION LONGITUDE ---------- E 14.60
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1958 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Ionosonde at 1-10 MHz
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Bulletins, microfilm
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Pavel Triska
Geophysical Inst, Czechoslovak Acad Sci
Bocni II
Praha 4 Sporilov
Czechoslovakia 141 31

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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B01 Ionosphere Vertical Soundings (Cont.)

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RAROTONGA
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ITEM: 485
DATE:01/08/75 192

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 21.30
STATION LONGITUDE	E 200.10
ALTERNATE NAMES	
DATES OF OPERATION	1944 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	NZ P2 Ionosonde. 15 minute vertical hf records with gain runs at the hour. 5 minute records on RWDs. 1-22 MHz, 1000 km, sweep time 56 seconds.
RAW DATA	35mm negative film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, punched paper tape
DATA ROUTINELY PUBLISHED	Ionosphere Data / exchange or special request / limited mailing
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Slough· Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Officer in Charge Geophysical Observatory P.O. Box 2111 Christchurch New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Equipment manual until 1955 (March), J28 until 1957, then P2.

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RESOLUTE BAY
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ITEM: 486
DATE:17/04/75 200

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SANAE
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ITEM: 528
DATE:18/03/75 20b

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	S 70.31
STATION LONGITUDE ----------	E 357.65
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	06/1962 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Cossor Ionosonde, 1962-1975, Barry Research Vis 1 Vertichirp as from 2/1975. Cossor: 1.0-18MHz, height range 850km, sweep time 15s, peak power 1kW, P.R.F. 60pps; Chirp sounder: 0.5-15MHz, height range 1000km, sweep rate 50kHz/s, sweep duration 4min50s, peak power 8W, average power 3W, sweep commences on the hour, equivalent 3dB pulse width 30 microsec.
RAW DATA ----------	Film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	6 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	IONOSPHERIC DATA MONTHLY BULLETIN for SANAE, available on request
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes C1 Slough, C2 Tokyo
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Data Centre, Dept of Physics Rhodes University Grahamstown South Africa 6140
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data bulletins available from 06/1962 onwards.

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SAN CARLO CANAVESE
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ITEM: 616
DATE:21/10/75 20c

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
[illegible]	N 45.25

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Equipment manual until 1955 (March), J28 until 1957, then P2.

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RESOLUTE BAY

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ITEM: 486
DATE:17/04/75

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 74.70
STATION LONGITUDE ---------- E 265.10
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1948 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 1005W Sounder - ANT=DELTA - 300ft. base. Sounding schedule as at Ottawa; except no sounding at ISIS-B passes due to interference.
RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Film, tables, magnetic tape
DATA ROUTINELY PUBLISHED ---------- CANADIAN IONOSPHERIC DATA, monthly
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Engineering Support Div. (D.O.C.)
Dept. of Communications
1241 Clyde Ave.
Ottawa Ontario
Canada K2C 1Y3

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data usually available after 1/2 month.

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ADDRESS FOR INFORMATION ABOUT STATION ----- Data Centre, Dept of Physics
Rhodes University
Grahamstown
South Africa 6140

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data bulletins available from 06/1962 onwards.

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SAN CARLO CANAVESE
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ITEM: 616
DATE: 21/10/75 20C

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 45.25
STATION LONGITUDE ---------- E 7.63
ALTERNATE NAMES ---------- Torino
DATES OF OPERATION ---------- 01/1976 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Digisonde 128, Ionograms, for description of instrument see: M. Lindeman Phillips, Ground-based vertical-incidence ionograms, IEEE Transactions on Antennas and Propagation, Vol. AP-22, No 6, November 1974, pp. 785-795. One sounding every hour.
RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------- 2 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ G. C. Rumi
Ist Elettrotecnico Naz Galileo Ferraris
Corso Massimo dAzeglio 42
Torino
Italy 10125

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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B01 Ionosphere Vertical Soundings (Cont.)

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SCOTT BASE
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ITEM: 543
DATE:01/08/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 77.81
STATION LONGITUDE	E 166.76
ALTERNATE NAMES	
DATES OF OPERATION	03/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	P2 ionosonde, 15 minute vertical hf records. NZ P2 ionosonde, 1-22 MHz, 1000km, records on 35mm film, gain runs on hour, otherwise 15 minute operation except RWD when 5 minute operation. Sweep time 56 seconds.
RAW DATA	35mm negative film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, punched paper tape
DATA ROUTINELY PUBLISHED	Ionosphere Data/exchange or special request/limited mailing list. Hourly values of standard parameters
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Slough, Toyko
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Officer in Charge Geophysical Observatory P.O. Box 2111 Christchurch New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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SEOUL
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ITEM: 549
DATE:13/03/75 2-1a

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 37.23
STATION LONGITUDE ----------	E 126.57
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1966 to present Station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Model NJZ-502A Ionospheric Layer Measuring Equipment. Ionosphere Vertical Soundings. 1)Freq. range: 400kHz-15MHz, 2)Type of observation: h f flow recording on 35mm film, 3)Film feed: 100mm for one, 4)Observing schedule: every 30 minutes. (RWC: 15 min.)
RAW DATA ----------	Film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Computer printouts, tables
DATA ROUTINELY PUBLISHED ----------	IONOSPHERIC DATA IN KOREA (foF2, M(3000)F2, h F2, foF1, M(3000)F1, h F, foE, foEs, fbEs, Type of Es, fmin).
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes England, Japan
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	The Director Radio Research Laboratory Ministry of Telecommunications Seoul (Anyang) Republic of Korea 171
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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B01 Ionosphere Vertical Soundings (Cont.)

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SHEEP CREEK
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ITEM: 123
DATE:05/06/75 21 h

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 64.93
STATION LONGITUDE ----------	E 212.00
ALTERNATE NAMES ----------	College
DATES OF OPERATION ---------	1954 to present 07/1969 station moved
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	C-3 Ionosonde, ionospheric density layers, ionosonde transmits a 0.5 to 20 MHz frequency scan over a 30 second period once every 15 minutes. Received returns are displayed on an oscilloscope and recorded on 35 mm film.
RAW DATA ----------	35 mm film
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Archives Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Previous to 07/1969, this facility was located 6 miles SW at N64.86 E212.17.

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SLOUGH
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ITEM: 561
DATE:11/07/75 21C

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 51.48
STATION LONGITUDE ----------	E 359.43
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1931 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	SRC MkIII Ionosonde (since 11/1972). Vertical incidence soundings. Range 1-20 MHz. Logarithmic frequency scale. 1000 km height scale (main height marks 100 km, subdivided at 20 km). Peak pulse power 20 kW. Hourly recordings plus quarter hourly on R.W.D.s, ionograms on 35mm film.
RAW DATA ----------	Since 1957 35mm film. (Prior-70mm photographic paper
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Tables, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ----------	SLOUGH IONOSPHERIC DATA. Available on request. Monthly bulletins. Standard B01 Ionogram parameters, f plots for R.W.D.s
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes Tokyo, Slough
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	World Data Centre C1 Science Research Council, Appleton Lab Ditton Park Slough England United Kingdom SL39JX
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data usually available after 1 working day.

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B01 Ionosphere Vertical Soundings (Cont.)

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SOUTH GEORGIA
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ITEM: 566
DATE:25/06/75 212

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- S 54.27
STATION LONGITUDE ---------- E 323.50
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- D.S.I.R. Mark II (Union Radio) Ionosonde. Ionosphere V.I. soundings 1/4 hourly throughout period. Expanded height scale (300 km) on 1/2 hour to 3 MHz. Frequency range 0.65-15 MHz, sweep time 4 min, peak power 1 kW, P.R.F. 50 Hz. Pulse length normally 150 microsec. Height range 1000 km (normal), 300 km (expanded). Antennae vertical delta to 7 MHz, vertical rhombic to 15 MHz.

RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 5-18 MONTHS
FORM OF REDUCED DATA ---------- Computer printout, punched cards, magnetic tape, f-plots
DATA ROUTINELY PUBLISHED ---------- IONOSPHERIC DATA, SOUTH GEORGIA, published WDC-C1
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Slough, England
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. J. R. Dudeney
British Antarctic Survey, Appleton Lab
Ditton Park
Slough Bucks
England SL39JX

ADDRESS FOR INFORMATION ABOUT DATA -------- World Data Centre - C1
Appleton Laboratory
Ditton Park
Slough Bucks
England SL39JX

ADDITIONAL COMMENTS ----- Special purpose data usually available after 1 month (selected parameters). Regular data reduction processed in yearly batches.

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SOUTH UIST
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ITEM: 571
DATE:11/07/75 22a

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 57.37
STATION LONGITUDE ----------	E 352.67
ALTERNATE NAMES ----------	West Geirinish, Scotland
DATES OF OPERATION ----------	11/1967 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Magnetic A/B ionosonde. Vertical incidence soundings. Range 0.25-20 MHz. Logarithmic frequency scale. 1000 km height scale. Peak pulse power 25 kW. Recordings at 00, 06, 10, 12, 14, 18 GMT except during rocket campaign periods when recordings are every h or more frequently.
RAW DATA ----------	Since 01/1969 35mm film. Prior to 1969, 70mm photographic paper
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables (daily worksheets)
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes Slough
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	World Data Centre C1 Science Research Council, Appleton Lab Ditton Park Slough England UK SL3 9JX
ADDRESS FOR INFORMATION ABOUT DATA --------	
ADDITIONAL COMMENTS -----	Special purpose data available after 1 month.

****
ST. JOHNS
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ITEM: 575
DATE: 17/04/75 22b

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 47.60
STATION LONGITUDE ----------	E 307.30

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS ----- Special purpose data available after 1 month.

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ST. JOHNS
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ITEM: 575
DATE: 17/04/75 22 4

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 47.60
STATION LONGITUDE ---------- E 307.30
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1943 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- S11 Instrument. 2.5 kW pulsed sounder - double delta antenna - 90 ft. mast. Sounding schedule same as Ottawa.
RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Magnetic tape
DATA ROUTINELY PUBLISHED ---------- CANADIAN IONOSPHERIC DATA (monthly)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Engineering Support Div. (D.O.C.)
Department of Communications
1241 Clyde Ave
Ottawa Ontario
Canada K2C IY3

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Manual observations started in 1943, automatic observations started in 1951. New site and 1005 W sounder April 1976. Special purpose data usually available after 1/2 month.

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B01 Ionosphere Vertical Soundings (Cont.)

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SYOWA
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ITEM: 1141
DATE:20/03/75 22 C

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	S 69.00
STATION LONGITUDE ----------	E 39.35
ALTERNATE NAMES ----------	SW, 16R
DATES OF OPERATION ----------	02/1959 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	PIR-9 ionosonde (Japanese made), peak power 10 kW, frequency sweep 1-15 MHz, 00,15,30,45 min past every hour, 35 mm film, 10 cm/observations, ionofax sheet 210x297/observation (every half hour).
RAW DATA ----------	35 mm film, ionofax
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	18 MONTHS
FORM OF REDUCED DATA ----------	Table, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ----------	IONOSPHERIC DATA AT SYOWA STATION issued semi-annually by RRL, tables, f-plots (RWD only)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	United Kingdom
ADDRESS FOR INFORMATION ABOUT STATION -----	Syowa Base (Japanese Antarctic Res Exp) Radio Research Laboratories 2-1, Nukui-Kitamachi 4-chome Koganei-shi Tokyo Japan 184
ADDRESS FOR INFORMATION ABOUT DATA --------	WDC-C2 for Ionosphere Radio Research Laboratories 2-1, Nukui-Kitamachi 4-chome Koganei-shi Tokyo Japan 184
ADDITIONAL COMMENTS -----	Base closed from 2/1961 to 1/1966. INAG member. Special purpose data available after 15 months.

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TAHITI
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ITEM: 589
DATE:17/02/76

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	S 17.73
STATION LONGITUDE ----------	E 210.68
ALTERNATE NAMES ----------	Taravao
DATES OF OPERATION ----------	12/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	C4 Ionosonde. Ionograms every hour (and every 15 minutes on RWD) (1.2 MHz)
RAW DATA ----------	35mm film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Monthly tables of hourly values, every 15 minutes
DATA ROUTINELY PUBLISHED ----------	BULLETIN DE MESURES IONOSPHERIQUES
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Monsieur lIngenier, charge du Dept MIR CNET Route de Tregastel Lannion France 22301
ADDRESS FOR INFORMATION ABOUT DATA --------	
ADDITIONAL COMMENTS -----	

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TAHITI
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ITEM: 590
DATE:26/01/76

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	S 17.70

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS -----

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TAHITI
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ITEM: 590
DATE:26/01/76

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	S 17.70
STATION LONGITUDE ----------	E 210.70
ALTERNATE NAMES ----------	Taravao
DATES OF OPERATION ----------	12/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Ionosonde. Ionograms every hour (and every 15 minutes on RWD) (1-20 MHz)
RAW DATA ----------	35mm film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Monthly tables of hourly values (and every 15 minutes)
DATA ROUTINELY PUBLISHED ----------	BULLETIN DE MESURES IONOSPHERIQUES
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Monsieur le chef du Departement TMA/MIR C.N.E.T. Route de Tregastel Lannion France 22301
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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1 167

B01 Ionosphere Vertical Soundings (Cont.)

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TEHRAN
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ITEM: 755
DATE:00/00/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 35.70
STATION LONGITUDE	E 51.40
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Reports
DATA ROUTINELY PUBLISHED	JOURNAL OF EARTH AND SPACE PHYSICS (Tehran Univ.), also monthly and yearly reports
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Hossein Keshi Afshar Institute of Geophysics Tehran University Amirabad Tehran Iran
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ITEM: 600

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THULE
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ITEM: 728
DATE:00/00/75 232

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 77.50
STATION LONGITUDE	E 290.80
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde, 1-25 MHz
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	35 mm film
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Viggo Neble Jensen Ionosphere Lab, Building 349 Technical University of Denmark Lyngby Denmark DK
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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TIXIE BAY
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ITEM: 842
DATE:00/00/75 24/2

ADDITIONAL COMMENTS ------

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TERRE ADELIE
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ITEM: 600
DATE:27/01/76 23C

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	S 66.66
STATION LONGITUDE ----------	E 140.02
ALTERNATE NAMES ----------	Dumont dUrville
DATES OF OPERATION ----------	02/1951 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Ionosonde Magnetic AB - Ionograms every 5 minutes (0.25 - 20 MHz).
RAW DATA ----------	35 mm and 16 mm film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	15 MONTHS
FORM OF REDUCED DATA ----------	Monthly tables of hourly values, magnetic tape since 04/1969
DATA ROUTINELY PUBLISHED ----------	BULLETIN DE MESURES IONOSPHERIQUES
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Directeur des Laboratoires Scientifiques T.A.A.F. 27 rue Oudinot Paris France 75700
ADDRESS FOR INFORMATION ABOUT DATA --------	Chef du Departement TMA/MIR C.N.E.T. Route de Tregastel Lannion France 22301

ADDITIONAL COMMENTS -----

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ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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TIXIE BAY
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ITEM: 842
DATE: 00/00/75 2 4 a

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 71.60
STATION LONGITUDE ---------- E 129.00
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Ionosonde
RAW DATA ---------- 35 mm microfilm tables
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- 35 mm film of continuous records
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. A. P. Mamrukov
Inst of Cosmophysical Res and Aeronomy
Lenin Avenue 61
Yakutsk
USSR

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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168

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B01 Ionosphere Vertical Soundings (Cont.)

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TOMSK
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ITEM: 825
DATE:00/00/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 56.00
STATION LONGITUDE	E 84.00
ALTERNATE NAMES	
DATES OF OPERATION	07/1944 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionosonde at 1-18 MHz, electron densities and heights of reflection are measured in 15 minutes.
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. I. Likhachev Siberian Physical and Technical Inst Square of Revolution I Tomsk USSR 634050
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

169

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ITEM: 628

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TRELEW

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ITEM: 815
DATE:00/00/75 24d

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	S 43.20
STATION LONGITUDE ----------	E 294.70
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1958 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Ionosonde at 1.3-18 MHz
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Bulletins or reports
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -------	Prof. I. Mesterman Avenida del Libertador No. 327 Vicente Lopez Buenos Aires Argentina
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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TROMSO

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ITEM: 705
DATE:00/00/75 25a

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 69.70
STATION LONGITUDE ----------	E 19.00

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TOWNSVILLE
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ITEM: 628
DATE:31/03/75 24C

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 19.30
STATION LONGITUDE	E 146.73
ALTERNATE NAMES	
DATES OF OPERATION	06/1946 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IPS Type IIIB ionosonde, vertical ionosphere sounding, routine vertical soundings every 15 minutes
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Table, computer printout
DATA ROUTINELY PUBLISHED	Australian ionospheric data computer listing monthly; vertical incidence data
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Tokyo, Japan; Slough, U.K.
ADDRESS FOR INFORMATION ABOUT STATION	Assistant Secretary Ionospheric Prediction Service Box 702, P.O. Darlinghurst N.S.W. Australia 2010
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS -------

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TROMSO

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ITEM: 705
DATE:00/00/75 25a

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 69.70
STATION LONGITUDE ---------- E 19.00
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Ionosonde, 0.6-25 MHz
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Bulletins
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Mr. Ove Bratteng
Auroral Obs, Univ of Tromso
P.O. Box 953
Tromso
Norway N-9001

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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169

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B01 Ionosphere Vertical Soundings (Cont.)

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UPPSALA
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ITEM: 1092
DATE:08/07/75 25A

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 59.80
STATION LONGITUDE ----------	E 17.60
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1952 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	J4 Ionosonde, virtual height and electron density of the ionospheric layers, frequency range 0.33-20 MHz, sweep time 3 min or 1 min, approx. peak power 10 kW, pulse repetition rate 50 Hz line, pulse length 70 microsec, height range 800 km, Delta antenna type, routine sounding, hourly, on photographic paper, 16 mm film, one ionogram per min, on special occasions.
RAW DATA ----------	Photographic paper or 16 mm film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Computer printouts
DATA ROUTINELY PUBLISHED ----------	IONOSPHERIC DATA, Research Inst of National Defence, Stockholm, Sweden
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Mr. Ake Hedberg Uppsala Ionospheric Observatory Uppsala 1 Sweden S-755 90
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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USHUAIA
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ITEM: 811
DATE:00/00/75 25C

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VANDENBURG AFB
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ITEM: 658
DATE:14/01/76 250

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 34.72
STATION LONGITUDE ---------- E 239.43
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1963 to present
Station moved
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ------ Ionosonde
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Col. Dale J. Flinders
Hq AWS/DN
Headquarters Air Weather Service
Stott AFB IL
USA 62225

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Sounder moved 03/27/74 from N34.60 E239.42.

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ITEM: 463

ADDRESS FOR INFORMATION ABOUT DATA -----
ADDITIONAL COMMENTS -----

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USHUAIA

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ITEM: 811
DATE:00/00/75

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	S 54.80
STATION LONGITUDE ----------	E 291.70
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	11/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Ionosonde at 1.3-18 MHz
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Bulletins or reports
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. I. Mesterman Avenida del Libertador No. 327 Vicente Lopez Buenos Aires Argentina
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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VANDENBERG AFB
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ITEM: 463
DATE:13/03/75 26a

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 34.73
STATION LONGITUDE ---------- E 239.43
ALTERNATE NAMES ---------- Point Arguello
DATES OF OPERATION ---------- 06/1963 to present
Station moved
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Granger 3905-4, 1128-4 Power Amplifier, hourly VI Ionograms. Observations are recorded on 35mm film each hour and are introduced into the Astro-geophysical Network (ATN) each hour by reading a CRT display. Film is interpreted and recorded on hourly summary sheets recommended in URSI Hand-book of Ionogram Interpretation and Analysis. Real time observations include FoF2, M3000; fmin and a qualifying code only.
RAW DATA ---------- 35mm film, hourly values DATA SHEET
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- 35mm filmed ionogram (2-16MHz), Standard URSI Hourly Values
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Det 30, 6WWg
Vandenberg AFB
CA
USA 93437

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Former station location: July 1974 N34.36, W120.35.
Special purpose data usually available as requested.

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B01 Ionosphere Vertical Soundings (Cont.)

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VANIMO
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ITEM: 659
DATE:31/03/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	S 2.70
STATION LONGITUDE	E 141.30
ALTERNATE NAMES	
DATES OF OPERATION	07/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IPS Type IIID ionsonde, vertical ionospheric sounding, routine soundings every 15 minutes
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Table, computer printout
DATA ROUTINELY PUBLISHED	Australian ionospheric data computer listing monthly, vertical incidence data
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Tokyo, Japan; Slough, U.K.
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Assistant Secretary Ionospheric Prediction Service P.O. Box 702 Darlinghurst N.S.W. Australia 2010
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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WAKKANAI
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ITEM: 664
DATE: 20/03/75 26C

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 45.39
STATION LONGITUDE	E 141.69
ALTERNATE NAMES	KK, 545
DATES OF OPERATION	03/1947 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Type 8 (Japanese made) ionosonde, ionospheric vertical soundings, peak power 10 kW, frequency sweep 1 - 20 MHz, 00, 15, 30 and 45 min past every hour, 35 mm film: 10 cm/observation.
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, graphical, plots, computer printouts
DATA ROUTINELY PUBLISHED	IONOSPHERIC DATA IN JAPAN, monthly issued by RRL, tables, f-plots
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes United Kingdom
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Wakkanai Radio Wave Observatory Radio Research Laboratories 3-20 Midori 2-chome Wakkanai-shi Hokkaido Japan 097
ADDRESS FOR INFORMATION ABOUT DATA	WDC C2 for Ionosphere Radio Research Laboratories 2-1, Nukui-Kitamachi 4-chome Koganei-shi Tokyo Japan 184
ADDITIONAL COMMENTS	INAG. Special purpose data available after 1 month.

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B01 Ionosphere Vertical Soundings (Cont.)

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WALLOPS ISLAND
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ITEM: 665
DATE:20/02/75

DISCIPLINE	B01 Ionosphere Vertical Soundings
STATION LATITUDE	N 37.94
STATION LONGITUDE	E 284.53
ALTERNATE NAMES	
DATES OF OPERATION	07/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	J-5W ionosonde, ionograms every 15 min (film). The J-5W is a highly advanced vertical incidence ionospheric recorder. Sweeps made every 15 min of the 24-hour day throughout the year. All data recorded on 35 mm film. The J5 sounder and field strength are set to EST.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Robert S. Gray, Sr. NOAA Ionosphere Sounding Obs. Building E-144 NASA Wallops Station Wallops Island VA USA 23337
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 1 day.

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ITEM: 841
DATE:00/00/75

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YAMAGAWA
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ITEM: 684
DATE:20/03/75 2 7 b

DISCIPLINE ---------- B01 Ionosphere Vertical Soundings
STATION LATITUDE ---------- N 31.20
STATION LONGITUDE ---------- E 130.62
ALTERNATE NAMES ---------- YG, 431
DATES OF OPERATION ---------- 12/1946 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Type 8 (Japanese made) ionosonde, ionospheric vertical soundings, peak power 10 kW, frequency sweep 1-20 MHz, 00, 15, 30 and 45 min past every hour, 35 mm film 10 cm/observation

RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Table, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ---------- IONOSPHERIC DATA IN JAPAN, issued monthly by RRL, tables, f-plots
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
United Kingdom
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR IN@ORMATION ABOUT STATION ----- Yamagawa Radio Wave Observatory
Radio Research Laboratories
2719 Narikawa, Yamagawa-machi
Ibusuki-gun Kagoshima-ken
Japan 891-05

ADDRESS FOR INFORMATION ABOUT DATA -------- WDC C2 for Ionosphere
Radio Research Laboratories
2-1, Nukui-Kitamachi 4-chome
Koganei-shi Tokyo
Japan 184

ADDITIONAL COMMENTS ----- INAG. Special purpose data available after 1 month.

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 1 day.

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YAKUTSK
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ITEM: 841
DATE:00/00/75 27a

DISCIPLINE ----------	B01 Ionosphere Vertical Soundings
STATION LATITUDE ----------	N 62.00
STATION LONGITUDE ----------	E 129.70
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	02/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Ionosonde
RAW DATA ----------	35 mm microfilm tables
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER --------	MONTHS
FORM OF REDUCED DATA ----------	35 mm film of continuous records
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. A. P. Mamrukov Inst of Cosmophysical Res and Aeronomy Lenin Avenue 61 Yakutsk USSR
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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B02 Topside-Vertical Incidence Soundings

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KASHIMA
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ITEM: 299
DATE:20/03/75 1a

DISCIPLINE	B02 Topside-Vertical Incidence Soundings
STATION LATITUDE	N 35.95
STATION LONGITUDE	E 140.67
ALTERNATE NAMES	
DATES OF OPERATION	08/1966 to present
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Telemetery equipment, 15-20 min/pass, magnetic tape 15 inch/s.
RAW DATA	Magnetic tape
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	4 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	DATA ON TOPSIDE IONOSPHERE,issued by RRL irregularly
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes United Kingdom
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Kashima Branch Radio Research Laboratories Hirai Kashima-machi Kashima-gun Ibaraki-Ken Japan 314
ADDRESS FOR INFORMATION ABOUT DATA	Information Processing Division Radio Research Laboratories 2-1, Nukui-Kitamachi 4-chome Koganei-shi Tokyo Japan 184
ADDITIONAL COMMENTS	Satellites monitored include Alouette I and II, ISIS I and II, ISS (Japanese) planned. Special purpose data available after 1 month.

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****
TERRE ADELIE

ITEM: 601
DATE:27/01/76 1b

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WINKFIELD
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ITEM: 670 / C
DATE:02/07/75

DISCIPLINE ---------- B02 Topside-Vertical Incidence Soundings
STATION LATITUDE ---------- N 51.45
STATION LONGITUDE ---------- E 359.30
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1962 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Standard NASA telemetry equipment, topside sounding, telemetry station.
RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Tables, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Greenbelt, Slough
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Science Research Council
Appleton Laboratory
Ditton Park
Slough England
UK SL3 9JX

ADDRESS FOR INFORMATION ABOUT DATA -------- World Data Centre C1
Science Research Council, Appleton Lab.
Ditton Park
Slough England
UK SL3 9JX

ADDITIONAL COMMENTS ----- Winkfield (Wnkfl) is a participating command and data acquisition station (stadan) in the ISIS network

Koganei-shi Tokyo
Japan 184

ADDITIONAL COMMENTS ----- Satellites monitored include Alouette I and II, ISIS I and II, ISS (Japanese) planned. Special purpose data available after 1 month.

****
TERRE ADELIE
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ITEM: 601
DATE: 27/01/76

DISCIPLINE ---------- B02 Topside-Vertical Incidence Soundings
STATION LATITUDE ---------- S 66.66
STATION LONGITUDE ---------- E 140.02
ALTERNATE NAMES ---------- Dumont dUrville
DATES OF OPERATION ---------- 01/1972 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Satellite receiving station, Topside soundings, ISIS and TD1-A satellite signals (on 135-138 MHz)
RAW DATA ---------- Analog magnetic tapes
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Directeur des Laboratoires Scientifiqu
T.A.A.F.
27 rue Oudinot
Paris
France 75700

ADDRESS FOR INFORMATION ABOUT DATA -------- Laboratoire de Geophysique Externe
4 Av. de Neptune
Saint Maur
France 94100

ADDITIONAL COMMENTS ----- Data are available on request at Communication Research Center, Ottawa.

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173

B03 Incoherent Scatter Soundings

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ARECIBO
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ITEM: 29
DATE:30/01/76

DISCIPLINE ----------	B03 Incoherent Scatter Soundings
STATION LATITUDE ----------	N 18.35
STATION LONGITUDE ----------	E 293.25
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	11/1963 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	430 MHz radar measures Ne, Te, Ti, Vi, Vin, in E and F regions at least once/month for 30 h. Occasionally measures D-region and topside.
RAW DATA ----------	Digital magnetic tape
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Magnetic tape, computer printouts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	James C. G. Walker Arecibo Observatory Post Office Box 995 Arecibo Puerto Rico 00612
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Ionosonde, airglow, Faraday rotation; special purpose data available after 3 months.

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CHATANIKA
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ITEM: 104
DATE:14/02/75 1b

DISCIPLINE ---------- B03 Incoherent Scatter Soundings
STATION LATITUDE ---------- N 65.10
STATION LONGITUDE ---------- E 212.55
ALTERNATE NAMES ----------

DNA617 radar
DATES OF OPERATION --------- 06/1971 to present
Operation irregular
OBSERVING SCHEDULE --------- Occasional
INSTRUMENT DESCRIPTION ----- Incoherent scatter radar. Ionosphere electric fields, electron precipitation, plasma temperatures, electrojet currents, neutral winds, integrated conductivities. Radar operates at 1290 MHz, observations scheduled 1 month in advance and average about 100 h/month, time resolution varies between a few seconds and a few tens of min depending on ionospheric conditions and experiments being performed.

RAW DATA ---------- Digital magnetic tape, computer printouts, computer plots
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1-6 MONTHS
FORM OF REDUCED DATA ---------- Digital magnetic tape, graphical plots, computer printout

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Murray J. Baron
Stanford Research Institute
333 Ravenswood Ave.
Menlo Park California
USA 94025

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose observations are usually available after 1-6 months. Station located at Stanford, California from 1966-1971. Co-investigators: Dr. Robert Hunsucker, Geophysical Institute, University of Alaska, Fairbanks, AK, USA, 99701. Composite 1290 GHz 4MW pulsed radar, 88 foot dish, 0.6 degree beamwidth 47dB gain, fully steerable, 150 degree noise temperature receiver; on-line XDS 930 computer provides fast data reduction. Radar operated for specific projects, primarily during fall and winter.

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B03 Incoherent Scatter Soundings (Cont.)

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JICAMARCA
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ITEM: 286
DATE: 28/03/75 1c

DISCIPLINE	B03 Incoherent Scatter Soundings
STATION LATITUDE	S 11.95
STATION LONGITUDE	E 283.13
ALTERNATE NAMES	
DATES OF OPERATION	06/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Incoherent Scatter Sounder, electron density, temperature and drift--18 432 dipole array with 1 degree beam and 4 milliwatt peak power capable of on line electron density, temperature and drift determinations from about 200 to 600 km normally. Also spread F measurements.
RAW DATA	Paper tape, graphs, photographic prints
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Graphical plots, photographic paper
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Carlos Calderon Ch. Inst Geof del Peru, Radio Obs Jicamar Av. Arequipa 701 Lima Peru 1
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MALVERN
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ITEM: 381
DATE: 21/04/75 1d

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MILLSTONE HILL

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ITEM: 404

DATE:13/02/75 2

DISCIPLINE	B03 Incoherent Scatter Soundings
STATION LATITUDE	N 42.62
STATION LONGITUDE	E 288.51
ALTERNATE NAMES	
DATES OF OPERATION	02/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Vertical incidence sounding Digisonde 128 sounder. Incoherent Scatter Radar is typically operated twice per month for 24 hours each time. Measures electron density, electron and ion temperatures, vertical velocities either over 100-600 km or over 200-1000 km with time resolution of about 30 min.
RAW DATA	Digital magnetic tape, computer printouts
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Graphical plots, computer printouts, punched cards
DATA ROUTINELY PUBLISHED	Lincoln Laboratory Technical Reports: eg TR 374, TR 430, TR 474, TR 481, TR 482, TR 499
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. John V. Evans Lincoln Laboratory MIT Wood St. - P.O. Box 73 Lexington MA USA 02173
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Radar is operated in concert with other incoherent scatter radars according to plans developed by the URSI Working Group III-9 on Incoherent Scatter. (Chairman: P. Bauer, CNET, ISSY-les-Moulineaux, Seine, France). Special purpose data usually available after 12 months.

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS -----

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MALVERN
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ITEM: 381
DATE: 21/04/75

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DISCIPLINE ----------	B03 Incoherent Scatter Soundings
STATION LATITUDE ----------	N 52.13
STATION LONGITUDE ----------	E 357.67
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1968 to present Intermittent operation
OBSERVING SCHEDULE ----------	Occasional
INSTRUMENT DESCRIPTION ------	Incoherent Scatter Radar, measurements of 1) Ionospheric Electron Density, temperature, 100-500 km (1968-1974), using pulsed monostatic incoherent scatter radar (400.5 MHz), and 2) Drift velocity, temperatures, 120-400 km (1972-1975) using continuous wave quadristatic incoherent scatter radar (400.5 MHz). Operating usually on RWDs.
RAW DATA ----------	Computer printout
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER -------	6 MONTHS
FORM OF REDUCED DATA ----------	Computer printout
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. H. Rishbeth Appleton Laboratory Ditton Park Slough England SL3 9JX
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

B03 Incoherent Scatter Soundings (Cont.)

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SAINT SANTIN
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ITEM: 525
DATE:02/02/76

DISCIPLINE ----------	B03 Incoherent Scatter Soundings
STATION LATITUDE ----------	N 44.63
STATION LONGITUDE ----------	E 2.22
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	12/1965 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Incoherent scatter facility. One transmitter, 3 receiving antennae. Schedule: 3 days a month. Vertical profiles of electron densities, electron and ion temperatures. Ion drift vector (100-500 km). A complete profile is obtained in about 45 minutes.
RAW DATA ----------	Digital magnetic tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	6 MONTHS
FORM OF REDUCED DATA ----------	Magnetic tape, computer printout
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. P. Bauer CNET/CRPE 38-40 rue du Gl Leclerc Issy Les Moulineaux France 92131
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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B04 Oblique Incidence Soundings

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GRAHAMSTOWN
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ITEM: 939
DATE:12/03/75 1a

DISCIPLINE	B04 Oblique Incidence Soundings
STATION LATITUDE	S 33.27
STATION LONGITUDE	E 26.53
ALTERNATE NAMES	
DATES OF OPERATION	03/1958 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Barry Research VOS 1 Vertichirp, 0.5-15 MHz, 1000 km height range, 50 kHz/s sweep rate, sweep duration 4 min 50 s, 8 W peak power, 3 W average power, 30 microsec equivalent 3 dB pulse width, sweep commences on the hour. The continuous transmitted frequency increases linearly with time, thus echo delay time (virtual height) is directly proportional to the difference (beat) between the transmitted and received signals at any instant. The ionograms have the same format and presentation as conventional ones.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	IONOSPHERIC DATA, monthly bulletin for Grahamstown, available on request
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes C1 Slough, C2 Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Data Centre, Department of Physics Rhodes University Grahamstown Rep of South Africa 6140
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data bulletins are available for 1/3/58-31/8/58; 3/9/58-31/12/58; 3/1/59-22/2/59; 2/1965-12/1965; 7/1972 to present. Regularly scheduled data are normally reduced after 1-12 months depending on staffing.

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KIRUNA
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ITEM: 971
DATE:21/04/75 /h

DISCIPLINE ----------	B04 Oblique Incidence Soundings
STATION LATITUDE ----------	N 67.80
STATION LONGITUDE ----------	E 20.40
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1948 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Panoramic ionosonde (own construction), sweep duration 30 s, film recording, runs every 30 min, 3 gain runs, 0.6-17 MHz, regular ionospheric soundings, h(prime)t recordings on 2 fixed frequencies 3 and 7 MHz.
RAW DATA ----------	Film, punched cards, magnetic tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Computer printouts
DATA ROUTINELY PUBLISHED ----------	KIRUNA IONOSPHERIC DATA, monthly
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. R. Lindquist Research Institute of National Defence Section 346 Stockholm Sweden S10450 80
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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LA POSTA
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ITEM: 987
DATE:15/05/75 /c

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LA POSTA
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ITEM: 987
DATE: 15/05/75 /c

DISCIPLINE ---------- B04 Oblique Incidence Soundings
STATION LATITUDE ---------- N 32.40
STATION LONGITUDE ---------- E 243.50
ALTERNATE NAMES ---------- OL C, 12 Weather Squadron
Navy Electronic Lab Cen (NELC)
DATES OF OPERATION ---------- 10/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Oblique ionosonde, observatory operates daily from sunrise to sunset
RAW DATA ---------- Logs, chart rolls
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ OL C, 12th Weather Squadron
Route 1, Box 591
Campo CA
USA 92006

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Data are regularly sent to NELC, San Diego.

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B04 Oblique Incidence Soundings (Cont.)

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SANAE
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ITEM: 1044
DATE:12/03/75 12

DISCIPLINE ----------	B04 Oblique Incidence Soundings
STATION LATITUDE ----------	S 70.31
STATION LONGITUDE ----------	E 357.65
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	08/1975 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Barry Research VIS 1 Vertichirp, oblique incidence, transmission to Grahamstown, 0.5-15 MHz, 1000 km height range, 50 kHz/s sweep rate, 4min 50s sweep duration, 8W peak power, 3W average power, sweep commences on the hour, equivalent 3 dB pulse width 30 microsec.
RAW DATA ----------	Film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	6 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	IONOSPHERIC DATA MONTHLY BULLETIN FOR SANAE, available on request
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes C1 Slough, C2 Tokyo
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Data Centre Rhodes University Department of Physics Grahamstown Rep So Africa 6140
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data bulletins available from 6/1962.

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ST. KILDA
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ITEM: 524
DATE:17/04/75 1a

DISCIPLINE ---------- B04 Oblique Incidence Soundings
STATION LATITUDE ---------- S 34.73
STATION LONGITUDE ---------- E 138.54
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 06/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Granger Oblique Sounder Model 3905. Oblique ionograms for Yamagawa to St. Kilda path. Stepped frequency (160 channels), 4-64 MHz Oblique Sounder. 1)Short pulse (0.1 ms) and long pulse (1 ms) ionograms recorded every 30 minutes. 2)Routine transmissions at 04 minutes repeated every 10 minutes.

RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 6 MONTHS
FORM OF REDUCED DATA ---------- Computer printout, magnetic tape
DATA ROUTINELY PUBLISHED ---------- W.R.E. Ionospheric Data Bulletins containing hourly tabulations of MOF and LOF. Distributed to a number of research establishments.

DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------

ADDRESS FOR INFORMATION ABOUT STATION -----
Principal Officer, Iono. Studies Group
Weapons Research Establishment
Box 2151, G.P.O.
Adelaide South Australia
Australia 5001

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS ----- St. Kilda participates in a network with Yamagawa & Townsville. The Sounder at Yamagawa (N31.20, E130.62) is operated by the Japanese Radio Research Laboratories.

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B04 Oblique Incidence Soundings (Cont.)

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TOWNSVILLE
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ITEM: 629
DATE:07/04/75

DISCIPLINE	B04 Oblique Incidence Soundings
STATION LATITUDE	S 19.25
STATION LONGITUDE	E 146.75
ALTERNATE NAMES	
DATES OF OPERATION	09/1966 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Granger Oblique Sounder, Receiver Model 903, Oblique ionograms for St. Kilda to Townsville and Yamagawa to Townsville paths, stepped frequency (160 channels), 4-64 MHz, Oblique Sounder Receiver. (1) Short pulse (0.1 ms) ionograms for St. Kilda to Townsville every 60 minutes. (2) Short pulse (0.1 ms) and long pule (1 ms) ionograms for Yamagawa to Townsville every 60 minute.
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Computer printout, magnetic tape
DATA ROUTINELY PUBLISHED	W.R.E. - Ionospheric Data Bulletins containing hourly tabulations of MOF and LOF.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Principal Officer, Ionospheric Studies Weapons Research Establishment Box 2151, G.P.O. Adelaide South Australia Australia 5001
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Townsville participates in a network with St. Kilda and Yamagawa. The Sounder at Yamagawa (N 31.20, E 130.62) is operated by the Japanese Radio Research Laboratories. Monitoring for St. Kilda began in 9/1966, for Yamagawa in 6/1970. Original records serve need for St. Kilda to Townsville path.

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B06 Total Electron Content — Satellite Beacons

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ARCETRI
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ITEM: 1081
DATE: 23/08/76

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 43.75
STATION LONGITUDE ---------- E 11.25
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Satellite Beacon Observations, telemetry station for the SOLRAD satellites.
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Giuseppe Tagliaferri
Osservatorio Astrofisico di Arcetri
Largo E. Fermi, 5
Firenze
Italy 50125

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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ARECIBO
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ITEM: 30
DATE: 30/01/76

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 18.35
STATION LONGITUDE ---------- E 293.25
ALTERNATE NAMES ----------

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ARMIDALE
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ITEM: 32
DATE: 20/02/76 1C

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- S 30.50
STATION LONGITUDE ---------- E 151.50
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 05/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Satellite Beacon Observations
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts, magnetic tape
ATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. F. H. Hibberd
University of New England
Armidale N.S.W.
Australia 2351

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- It is intended to send data to WDC at Boulder eventually.

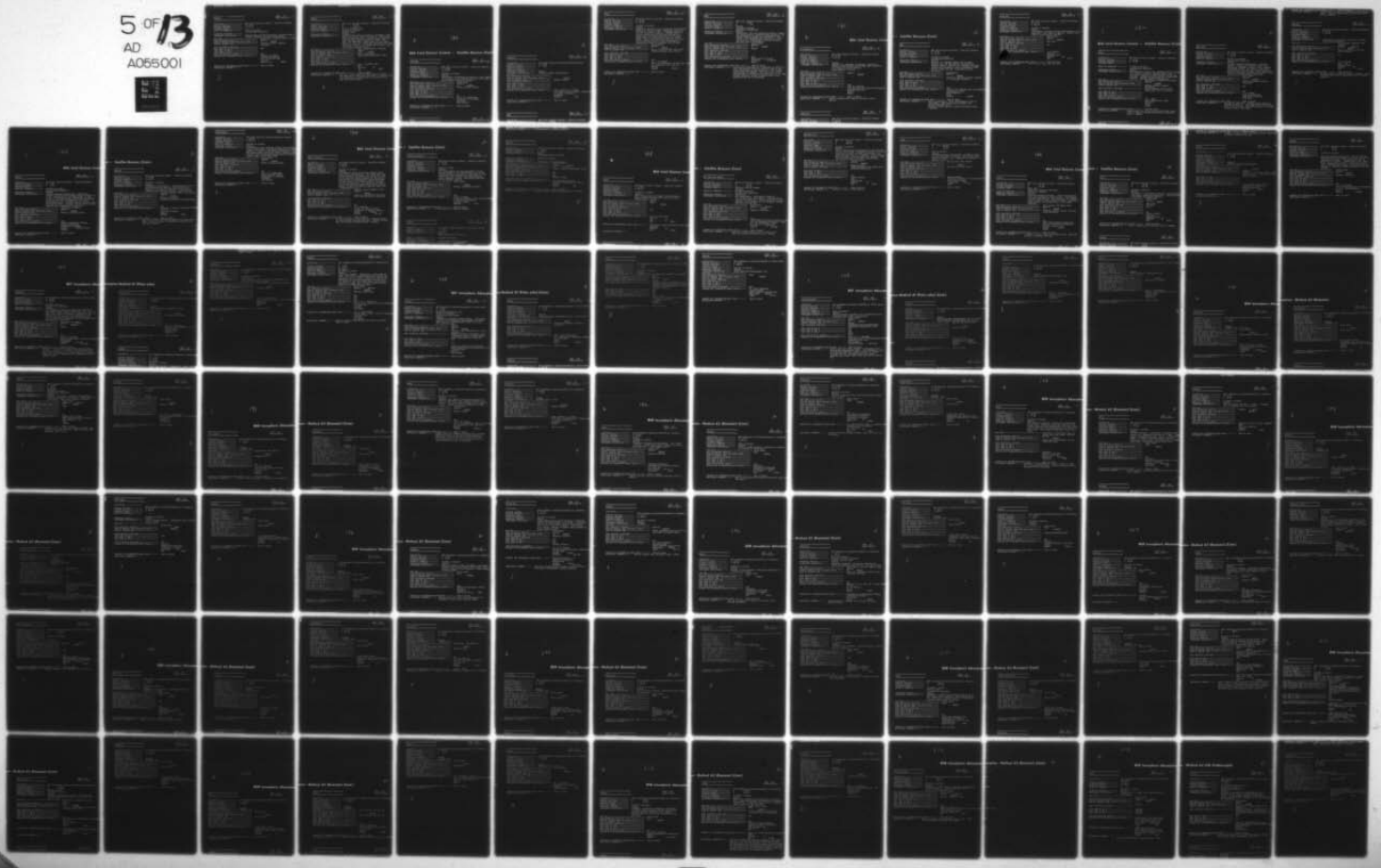
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ATHENS
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DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 37.85
STATION LONGITUDE ---------- E 23.72

AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

UNCLASSIFIED AFGL-TR-77-0255 NL

5 OF 13
AD
A055001



ADDITIONAL COMMENTS -----

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ARECIBO

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ITEM: 30
DATE: 30/01/76

DISCIPLINE ----------	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ----------	N 18.35
STATION LONGITUDE ----------	E 293.25
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1972 to present Intermittent operation
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION -----	Geostationary satellite monitor, standard observations, Faraday rotation measurements.
RAW DATA ----------	Strip chart, digital magnetic tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	James C. G. Walker Arecibo Obervatory Post Office Box 995 Arecibo Puerto Rico 00612
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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eventually.

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ATHENS
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ITEM: 1149
DATE:15/05/75 1d

DISCIPLINE ----------	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ----------	N 37.85
STATION LONGITUDE ----------	E 23.72
ALTERNATE NAMES ----------	OL-C, 2 Weather Wing
DATES OF OPERATION ----------	12/1965 to present Station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-250 Optical Telescope (H-alpha); AFGL Radio Telescopes, AFGL Polarimeter; observatory operates from sunrise to sunset daily, monitors four discrete radio frequencies (1415, 2695, 4995, and 8800 MHz); takes photos of the solar disk at a rate of 1 frame/min; monitors five high frequency receivers for detection of SWFs; monitors total electron content.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-C, 2 Weather Wing APO New York NY USA 09223
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data are at the National Observatory of Athens. The observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

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B06 Total Electron Content — Satellite Beacons (Cont.)

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AUCKLAND
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ITEM: 40
DATE:17/02/76 1a

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	S 37.00
STATION LONGITUDE	E 175.00
ALTERNATE NAMES	
DATES OF OPERATION	06/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Polarimeter, continuous recording at chart speed of 1 inch/h of the Faraday rotation of 137 MHz geostationary satellite signal.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	4 MONTHS
FORM OF REDUCED DATA	Tables (Hourly values)
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. J. E. Titheridge University of Auckland Auckland New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

180

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BELSK
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ITEM: 54
DATE:03/06/75 1b

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BRUXELLES
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ITEM: 704
DATE:00/00/75 2c

DISCIPLINE ---------- B06 Total Electron Content-Satellite Beacons
STATION LATITUDE ---------- N 50.50
STATION LONGITUDE ---------- E 4.20
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Satellite beacon observations
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Lucien G. A. Bossy
Inst Royal Meteorologique, Geophys E
3, Avenue Circulaire
Bruxelles
Belgium 1180

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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EBRO
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ITEM: 623
DATE:06/06/75 2d

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 40.82

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BELSK

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ITEM: 54

DATE:03/06/75

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons

STATION LATITUDE ---------- N 51.84

STATION LONGITUDE ---------- E 20.79

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 11/1974 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- Commercial receivers with converters and antennas working on 40 and 41 MHz. Amplitude registration of the beacon signals. INTASAT satellite beacon signals are received and registered. Strip chart recorders are used with the chart speed 6cm/h but occasionally with the higher speed. Every satellite pass with the satellite zenith distance greater than 70 degrees is registered, except on weekends and holidays.

RAW DATA ---------- Strip charts

DATA REDUCTION PRACTICE ---------- Regular

REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS

FORM OF REDUCED DATA ---------- Plots, tables of TEC, AFGL scintillation index each 1/2 min

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. A. W. Wernik
Inst. of Geophysics, Polish Acad. Sci.
ul. Pastera 3, P.O. Box 155
Warsaw
Poland 00-973

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS -----

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EBRO
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ITEM: 623
DATE: 06/06/75

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 40.82
STATION LONGITUDE	E .49
ALTERNATE NAMES	Tortosa
DATES OF OPERATION	10/1964 to present Operation intermittent
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Polarimeter, TEC from satellite beacons: normal and geostationary, Method Faraday Rotation, for normal beacons: passes near overhead of the station; for geostationary satellites: continuously with a mechanically rotating antenna, now also with a polarimeter.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Observatorio del Ebro Roquetas Tarragona Spain
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	From 10/1954 observations of Explorer 22 (BE-B) at 40-41 MHz Faraday rotation until the end of the living existence of the satellite. From 11/1974 observations of INTASAT. From 1/1973 to 2/1975 observations of geostationary satellites at 137 MHz, Faraday rotation; ready to operate when a new satellite will be in operation.

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B06 Total Electron Conte

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EL ARENOSILLO
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ITEM: 161
DATE:08/07/75 3a

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 37.10
STATION LONGITUDE ---------- E 353.25
ALTERNATE NAMES ----------
DATES OF OPERATION ---------
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Receiver for Ionospheric Beacons. Receives 2 signals of 40.010 MHz and 41.01025 MHz recording the respective polarizations.
Chart speed 0.1 cm.p.s.
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Juan M. Cisneros
Inst Nacional de Tecnica Aeroespacial
Torrejon de Ardoz
Madrid
Spain

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data usually available after 6 months.

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GOOSE BAY
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ITEM: 209
DATE:14/01/76 3

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 55.33
STATION LONGITUDE ---------- E 299.50

t — Satellite Beacons (Cont.)

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GRAZ
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ITEM: 215
DATE:14/03/75 3c

DISCIPLINE ----------	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ----------	N 47.10
STATION LONGITUDE ----------	E 15.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ---------	10/1964 to present Intermittent operation
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Receiver for Faraday Effect (40, 41 MHz), Receiver for 150 and 400 MHz (Differential Doppler effect), Explorer 22 (Faraday) and NNSS (Differential Doppler), Exp 22 twice/day, NNSS several times per day, instruments mostly self-built.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Tables of electron content reduced to a latitude of N47.0
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Institut fur Meteorologie und Geophysi University of Graz Halbarthgasse 1 Graz Austria A-8010
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Gaps in operation: after uselessness of Exp 22 (mid-1968). NNSS Differential Doppler obs. started November 1973. Special purpose data are usually available after 2 months.

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GOOSE BAY
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ITEM: 209
DATE:14/01/76

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DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 55.33
STATION LONGITUDE	E 299.50
ALTERNATE NAMES	
DATES OF OPERATION	11/1971 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Polarimeter, Faraday rotation measurements, 24 h operation, chart speed 15 mm/min. Hourly listings of scintillation and TEC.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	IBM cards
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	J. P. Mullen AFGL-LIR Hanscom Field Bedford MA USA 01731
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data sent to WDC-A are TEC only.

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B06 Total Electron Content — Satellite Beacons (Cont.)

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HAIFA
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ITEM: 222
DATE:13/03/75 3 d

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 32.87
STATION LONGITUDE	E 35.09
ALTERNATE NAMES	
DATES OF OPERATION	11/1964 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	R390 Receivers and others, Faraday fading records on 6 channel recorder, 20,40,41 MHz + time. Stationary satellite scintillations using rigor antennas. Studies of polarization of satellite signals. 400 MHz Doppler measurements.
RAW DATA	Strip chart, computer printouts
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, graphs, computer printouts
DATA ROUTINELY PUBLISHED	Annual Reports of the Radio Observatory (by AF contract)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. J. Mass Radio Observatory, NCSR POB 4655 Haifa Israel
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Participation in the Joint Satellite Study Group (JSSG). Special purpose data usually available after 12 months.

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HAMILTON

ITEM: 237
DATE:14/01/76 4a

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HONG KONG
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ITEM: 265
DATE:20/06/75

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 22.33
STATION LONGITUDE ---------- E 114.20
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 09/1963 to present
Intermittent operation
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Faraday Rotation Measurements, 1)linear antenna, frequency convertor, Racal radio, Sefram pen recorder, crystal clock, quarter wavelength dipole, for transit satellites; 2)Titheridge rotating Yagi, phase comparator, Rustrack recorder, frequency converter, Racal radio, for geostationary satellites.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Electron content profiles (selected)
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- G. O. Walker
Physics Department
Hong Kong University
Hong Kong

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- No results 1969-1974. Results using satellite INTASAT 11/1974 on. Also additional station at Bali S9.00 E114.00. Latitude profiles of content values at N23.3 available.

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Participation in the Joint Satellite Study Group (JSSG). Special purpose data usually available after 12 months.

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HAMILTON
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ITEM: 237
DATE:14/01/76 4a.

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 42.25
STATION LONGITUDE ---------- E 289.00
ALTERNATE NAMES ----------
DATES OF OPERATION ---------
OBSERVING SCHEDULE ---------
INSTRUMENT DESCRIPTION ----- Polarimeter, total power receivers, Faraday rotation measurements
RAW DATA ---------- Strip charts, magnetic tape (analog)
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Hourly listings of TEC and scintillations
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- H. E. Whitney
AFGL - LIR
Hanscom Field
Bedford MA
USA 01731

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- TEC data normally available after 3 months. Scintillation data usually available after 6 months (special).

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B06 Total Electron Conte

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IBADAN
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ITEM: 276
DATE: 28/10/75 4c

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 7.40
STATION LONGITUDE	E 3.90
ALTERNATE NAMES	
DATES OF OPERATION	03/1965 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Faraday Rotation observations, records on 3 channels, Evershed and Vignoles chart recorder at 6 ipm. Maximum of 2 good records/day in time ranges of 0730-0930UT and 1930-2130UT (depending on particular day) as INTASAT is in a sun synchronous orbit. INTASAT started 11/1974, also S66 from 03/1965 to 03/1969. Use of ATS-6 not yet started due to equipment difficulties.
RAW DATA	Strip chart, tables
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Ibadan Ionospheric Station Physics Department University of Ibadan Ibadan Western State Nigeria
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ITEM: 283

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nt — Satellite Beacons (Cont.)

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ITEM: 328
DATE: 20/01/76 5a

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 48.68
STATION LONGITUDE	E 356.50
ALTERNATE NAMES	
DATES OF OPERATION	07/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	*Ionospheric Polarimeter.* 1)*Gravity waves with* 4 stations Lannion, Beg Meil (N47.68 E354.32), Rennes (N47.1 E358.49), Poitiers (N46.35 E0.2). 2)Lannion only--group velocity, scintillations.
RAW DATA	Digital magnetic tape, strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Computer printouts
DATA ROUTINELY PUBLISHED	Bulletin de mesures ionospheriques
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Monsieur le chef du Departement TMA/N C.N.E.T. Route de Tregastel Lannion France 22301
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Beg Meil, Rennes and Poitiers operate on World days only. Their raw data is recorded on punched tape and strip charts.

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INVERCARGILL
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ITEM: 283
DATE:17/02/76

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DISCIPLINE ---------- B06 Total Electron Content-Satellite Beacons
STATION LATITUDE ---------- S 46.40
STATION LONGITUDE ---------- E 168.40
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 08/1965 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Polarimeter, total electron content from geostationary satellites, continuous recording at chart speed of 1 inch/h of the Faraday Rotation of 137 MHz geostationary satellite signal, antenna rotating at 1 Hz to give continuous record of polarization angle of 137 MHz signal.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 4 MONTHS
FORM OF REDUCED DATA ---------- Tables (hourly values)
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. J. E. Titheridge
Radio Research Centre
University of Auckland
Auckland
New Zealand

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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B06 Total Electron Cont

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LONDON (Ontario)
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ITEM: 357
DATE:17/02/76

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 42.59
STATION LONGITUDE	E 278.86
ALTERNATE NAMES	
DATES OF OPERATION	01/1976 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Differential Angle-of-arrival system, Satellite Beacon Observations. The instrument uses spaced antennas to measure the angle of arrival of satellite beacon signals at 150 MHz and 400 MHz and the differential angle-of-arrival between these 2 frequencies with an accuracy of 0.05 milliradian. The operation is essentially continuous although some records are on charts (2 mm/s) and some on magnetic tape with a resolution of 0.1 s.
RAW DATA	Charts, digital magnetic tape
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Plots of irregularity distribution over the area of coverage
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	P. A. Forsyth Center for Radio Science University of Western Ontario London Ontario Canada N6A 3K7
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Similar equipment is operated on a campaign basis at various high latitude stations. Special purpose data are usually available after 3 months.

nt — Satellite Beacons (Cont.)

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LOUVAIN-LA-NEUVE
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ITEM: 360
DATE:02/02/76 5c

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 50.75
STATION LONGITUDE	E 4.57
ALTERNATE NAMES	
DATES OF OPERATION	1976 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VHF -Polarimeter for the measurement of the Faraday effect on the ATS-6 beacon on 140 MHz, Instrument built according to the plans of the Centre National d'Etudes des Telecommunications, Lannion, France. Continuous recording of the Faraday rotation.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. L. Bossy U Cath de Louvain, Inst d'Astr/Geophy 2 chemin du Cyclotron Louvain-la-Neuv Belgium 1348
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Participation in European network.

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PENTELI
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ITEM: 906
DATE:18/03/75 5c

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 38.05
STATION LONGITUDE	E 23.86
ALTERNATE NAMES	Athens Natl Observatory of Athens
DATES OF OPERATION	08/1970 to present
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	Polarimeter, TEC observations
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular Special

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Participation in European network.

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PENTELI

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ITEM: 906
DATE:18/03/75

5c

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 38.05
STATION LONGITUDE ---------- E 23.86
ALTERNATE NAMES ---------- Athens
Natl Observatory of Athens

DATES OF OPERATION ---------- 08/1970 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ------ Polarimeter, TEC observations
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 0.5 MONTHS
FORM OF REDUCED DATA ---------- Tables, films, photographic paper
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Meudon, France
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Astronomical Institute
National Observatory of Athens
Athens
Greece 306

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data available after 0.5 months.

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B06 Total Electron Cont

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RAMEY
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ITEM: 479
DATE:13/03/75 ba

DISCIPLINE ----------	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ----------	N 18.50
STATION LONGITUDE ----------	E 292.80
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1973 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	ATS-3 Total Electron Content Recorder(TELCO). Data recorded 24 hours daily on strip chart (chart speed 4 inch/h).
RAW DATA ----------	Charts
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 12 WSQ (MAC) Box 261 FPO NY USA 09549
ADDRESS FOR INFORMATION ABOUT DATA --------	Natl Geop & Solar-Terrestrial Data Cen NOAA/EDS Boulder CO USA 80302
ADDITIONAL COMMENTS -----	

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SAGAMORE HILL

ITEM: 509
DATE:13/03/75 bb

nt — Satellite Beacons (Cont.)

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SAO JOSE DOS CAMPOS
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ITEM: 534
DATE:17/04/75

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- S 23.21
STATION LONGITUDE ---------- E 314.14
ALTERNATE NAMES ---------- INPE/Sao Jose dos Campos
San Jose
DATES OF OPERATION ---------- 07/1972 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ----- VHF Polarimeter. Polarization angle of 137.35 MHz signal from ATS-3. Rotating dipole antenna and receiver. Operation should be continuous, but breakdown of the equipment stopped operation during 1974.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Coordenador de Ciencia Espacial e da
Inst de Pesquisas Espaciais - INPE
Av. dos Astronautas, 1758
Sao Jose dos Campos Sao Paulo
Brasil 12.200

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Operation stopped during 1974. Special purpose data usually available after 1 month.

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ITEM: 1142

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SAGAMORE HILL
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ITEM: 509
DATE:13/03/75

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 42.63
STATION LONGITUDE ---------- E 289.18
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 03/1972 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Total electron content polarimeter (own design), 24 hour monitoring. Equipment consists of 2 Yagi antennas, an R390 receiver, polarimeter, and chart recorder run at 1.0 mm/min. Scintillation data are taken from the amplitude channel. The 136.470 MHz beacon from ATS 3 is monitored.

RAW DATA ---------- Analog charts
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Punched cards
DATA ROUTINELY PUBLISHED ---------- AFCRL GEOPHYSICS AND SPACE DATA BULLETIN (Quarterly)

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Jack Klobuchar
AFGL
Hanscom AFB
Bedford MA
USA 01730

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Station is part of USAF AWS SESS.

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SYOWA

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ITEM: 1142

DATE: 16/01/76 bd

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	S 69.00
STATION LONGITUDE	E 39.60
ALTERNATE NAMES	
DATES OF OPERATION	1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Satellite beacon observations, telemetry reception of VHF signal intensity, VLF natural wave, electron density, etc., observed by satellite -- EXOS A, B, etc.
RAW DATA	Pen and ink strip charts
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Pen and ink strip charts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Masaru Ayukawa National Institute of Polar Research 9-10, Kaga 1-chome Itabashi-ku Tokyo Japan 173
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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B06 Total Electron Conte

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TAIPEI
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ITEM: 591
DATE:13/03/75

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 25.20
STATION LONGITUDE	E 121.50
ALTERNATE NAMES	RWRL, NTU Radio Wave Research Laboratory
DATES OF OPERATION	10/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Satellite beacons receiver. Total electron content and ionospheric scintillation. Ten-element rotating Yagi antenna, VHF converter, HF communication receiver, dual channel recorder, regulated power supply, 24-h observation, chart speed 15mm/min.
RAW DATA	Dual channel recording chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Graphical plots, tables, and computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Radio Wave Research Laboratory Dept of Electrical Engineering National Taiwan Univ Taipei Taiwan China
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	A member of Joint Satellite Studies Group. Sponsored by AFGL in Bedford, MA, USA.

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THULE
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ITEM: 607
DATE:14/01/76

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 76.40
STATION LONGITUDE	E 291.30
ALTERNATE NAMES	
DATES OF OPERATION	06/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Polarimeter, total power receiver, Faraday Rotation Meas., Satellite beacon obs., 24h operation-Polarimeter terminated 06/1975.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	IBM Cards
DATA ROUTINELY PUBLISHED	TEC WDC
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	No
ADDRESS FOR INFORMATION ABOUT STATION	John P. Mullen AFGL-LIR Hanscom Field Bedford MA USA 01731
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 12 months.

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UPPSALA
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ITEM: 649
DATE:13/02/76

DISCIPLINE	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE	N 59.80
STATION LONGITUDE	E 17.60

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- A member of Joint Satellite Studies Group. Sponsored by AFGL in Bedford, MA, USA.

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TEHRAN
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ITEM: 757
DATE:00/00/75

DISCIPLINE ----------	B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ----------	N 35.70
STATION LONGITUDE ----------	E 51.40
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Faraday Rotation Measurements
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Reports
DATA ROUTINELY PUBLISHED ----------	JOURNAL OF EARTH AND SPACE PHYSICS (Tehran Univ.), also monthly and yearly reports
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. Hossein Keshi Afshar Institute of Geophysics Tehran University Amirabad Tehran Iran
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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UPPSALA

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ITEM: 649
DATE:13/02/76

DISCIPLINE ---------- B06 Total Electron Content - Satellite Beacons
STATION LATITUDE ---------- N 59.80
STATION LONGITUDE ---------- E 17.60
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 11/1975 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ------ Satellite beacon observations, 150 and 400 MHz. Observations during winter - electron content vs. geographic latitude. Evaluated data will be available on request. Conditions not yet specified. Observation method - 2 stations evaluation of differential doppler measurements using signals of navigation (NNSS) satellites (150 MHz, 400 MHz).

RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------- 4 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. R. Leitinger
Inst fur Meteorologie und Geophysik
U. Graz, Halbarthgasse 1
Graz
Austria A-8010

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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B07 Ionospheric Abso

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AHMEDABAD
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ITEM: 4
DATE:21/01/76

DISCIPLINE ----------	B07 Ionospheric Absorption-Method A1 (Pulse Echo)
STATION LATITUDE ----------	N 23.00
STATION LONGITUDE ----------	E 72.60
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1972 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	A1 Ionospheric Absorption Measuring Equipment, peak pulse power 30 kW, frequencies 1.8, 2.2, 2.5 MHz, pulse width 100 microsec, repetition rate 33 pulses per second. Receiver bandwidth 32 kHz, vertical delta antennas, hourly observations daily, chart speed 6 cm/hour, film and punch tape recording also provided.
RAW DATA ----------	Strip charts, tables
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	6 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. K. M. Kotadia Physics Department, Gujarat University Navrangpura Ahmedabad Gujarat India 380 009
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Gaps due to failure of power supply and equipment failure. Location not changed. Recording of short wave field strength of CW transmission from Colombo. Occasional rocket experiment with impedance probe at Thumba, India.

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ITEM: 846

bsorption-Method A1 (Pulse echo)

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BUENOS AIRES
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ITEM: 817
DATE:00/00/75

DISCIPLINE	B07 Ionospheric Absorption-Method A1 (Pulse ech
STATION LATITUDE	S 34.50
STATION LONGITUDE	E 301.50
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Pulse Amplitude Measurements (A1)
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Bulletins or reports
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. I. Mesterman Avenida del Libertador No. 327 Vicente Lopez Buenos Aires Argentina
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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COLOMBO
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ITEM: 125
DATE:02/06/75

DISCIPLINE	B07 Ionospheric Absorption-Method A1 (Pulse Ech
STATION LATITUDE	N 6.90
STATION LONGITUDE	E 79.87
ALTERNATE NAMES	Sri Lanka
DATES OF OPERATION	01/1976 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Pulse Echo sounder. Absorption - pulse echo m

thod. The pulse transmitter/receiver system

Occasional rocket experiment with impedance probe at Thumba, India.

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ASHKHABAD

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ITEM: 846

DATE:00/00/75

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DISCIPLINE	B07 Ionospheric Absorption-Method A1 (Pulse echo)
STATION LATITUDE	N 37.93
STATION LONGITUDE	E 58.37
ALTERNATE NAMES	
DATES OF OPERATION	06/1957 to present
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Pulse Amplitude (Pulse echo) measurements (A1) at 1.8-5 MHz, hourly values.
RAW DATA	35 mm film of continuous records
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. M. Shirmammedov Inst Phys Earth & Atm, Acad Sci Turkm Gogol 16 Ashkhabad USSR 744019
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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COLOMBO
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ITEM: 125
DATE:02/06/75

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DISCIPLINE ---------- B07 Ionospheric Absorption-Method A1 (Pulse Echo)

STATION LATITUDE ---------- N 6.90
STATION LONGITUDE ---------- E 79.87
ALTERNATE NAMES ---------- Sri Lanka
DATES OF OPERATION ---------- 01/1976 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Pulse Echo sounder. Absorption - pulse echo method. The pulse transmitter/receiver system operating on 1.8, 2.2 and 2.6 MHz will measure the absorption at vertical incidence, and the vertical height of the reflecting layer; daily measurements at local noon, and the diurnal measurements on the RWDs will be taken.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Monthly tabulations
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Mr. P. A. J. Ratnasiri
Ceylon Inst. of Sci. and Ind. Research
P.O. Box 787
Colombo
Sri Lanka

ADDRESS FOR INFORMATION ABOUT DATA -------- Dr. S. Gnanalingam
Ceylon Inst. of Sci. and Ind. Research
P.O. Box 787
Colombo
Sri Lanka

ADDITIONAL COMMENTS ----- Special purpose observations are usually available after 1 month.

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B07 Ionospheric Absorptio

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DE BILT
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ITEM: 142
DATE:15/05/75 2a

DISCIPLINE ----------	B07 Ionospheric Absorption-Method A1 (Pulse Echo)
STATION LATITUDE ----------	N 52.10
STATION LONGITUDE ----------	E 5.18
ALTERNATE NAMES ----------	Royal Netherlands Met Inst
DATES OF OPERATION ----------	01/1957 to present Intermittent 03-10/1967
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Ionospheric absorption measurements. Calibrated receiver and transmitter measurements are daily about noon at 5 frequencies, (1.95, 2.3, 2.6, 2.9, and 13.2 MHz).
RAW DATA ----------	Tables
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	10 MONTHS
FORM OF REDUCED DATA ----------	Tables: noon absorption at 5 frequencies
DATA ROUTINELY PUBLISHED ----------	Monthly bulletin (Ionospheric and Geomagnetic data) of Royal Netherlands Meteorological Institute
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Director, Division of Geophysics Royal Netherlands Meteorological Inst Utrechtse Weg De Bilt Netherlands
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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on-Method A1 (Pulse echo) (Cont.)

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GENOVA
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ITEM: 747
DATE:00/00/75

DISCIPLINE ---------- B07 Ionospheric Absorption-Method A1 (Pulse echo)
STATION LATITUDE ---------- N 44.55
STATION LONGITUDE ---------- E 8.95
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Pulse Amplitude Measurements (A1), 2 and 3 MHz
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Monthly and annual bulletins, microfilm
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Mario Bossolasco
Ist. Geofisico e Geodetico, Genoa U
P.O. Box 3145
Genoa
Italy I-16100

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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HIRAISO
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ITEM: 259
DATE:12/02/76

DISCIPLINE ---------- B07 Ionospheric Absorption-Method A1 (Pulse Echo)
STATION LATITUDE ---------- N 36.37

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DOURBES
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ITEM: 938
DATE: 02/02/76

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DISCIPLINE	B07 Ionospheric Absorption-Method A1 (Pulse echo)
STATION LATITUDE	N 50.10
STATION LONGITUDE	E 4.60
ALTERNATE NAMES	
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Digisonde 128 and Panoramic ionosonde (Breisach)
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	INSTITUT ROYAL METEOROLOGIQUE DE BELGIQUE BULLETIN MENSUEL - OBSERVATIONS IONOSPHERIQUES ET DU RAYONNEMENT COSMIQUE
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Pr. L. Bossy Geophys Ext, Inst Royal Meteorologiq 3, avenue Circulaire Bruxelles Belgium 1180
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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HIRAISO
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ITEM: 259
DATE:12/02/76

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DISCIPLINE ----------	B07 Ionospheric Absorption-Method A1 (Pulse Echo)
STATION LATITUDE ----------	N 36.37
STATION LONGITUDE ----------	E 140.63
ALTERNATE NAMES ----------	
DATES OF OPERATION ---------	01/1969 to present
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Pulse Amplitude Measurements (A1)
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Mr. Fujio Yamashita Hiraiso Branch Radio Research Laboratories Nakaminato Ibaraki Japan 311-12
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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B07 Ionospheric Absorpti

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JULIUSRUH/RUGEN
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ITEM: 956
DATE:11/08/75

DISCIPLINE	B07 Ionospheric Absorption-Method A1 (Pulse echo)
STATION LATITUDE	N 54.63
STATION LONGITUDE	E 13.38
ALTERNATE NAMES	
DATES OF OPERATION	1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Fixed frequency equipment for A1 absorption measurements near 2 MHz, continuously.
RAW DATA	Paper charts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	GEOPHYSIKALISCHE BEOBACHTUNGS-ERGEBNISSE (Geophysical Data)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
	Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Dr. K. Sprenger Observatorium fur Ionospharenforschung Mitschurin Str. 4-6 Kuhlungsborn German Dem Rep DDR 2565
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Several gaps and minor changes in frequency of A1 absorption measurements exist. The Geophysical Data is a monthly bulletin issued by Akad. d. Wissenschaften der DDR, Zentralinstitut fur solar-terrestrische Physik (HHI), DDR 1199 Berlin-Adlershof.

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ITEM: 816

tion-Method A1 (Pulse echo) (Cont.)

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UDAIPUR
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ITEM: 826
DATE:00/00/75

DISCIPLINE ----------	B07 Ionospheric Absorption-Method A1 (Pulse echo
STATION LATITUDE ----------	N 24.60
STATION LONGITUDE ----------	E 73.70
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Pulse Amplitude Measurements (A1) at 2-5MHz, hourly values, monthly means and medians
RAW DATA ----------	Pen and ink strip chart
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. R. K. Rai Department of Physics University of Udaipur Udaipur Rajasthan India
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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USHUAIA
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ITEM: 812
DATE:00/00/75

DISCIPLINE ---------- B07 Ionospheric Absorption-Method A1 (Pulse ec

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TRELEW

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ITEM: 816
DATE: 00/00/75

DISCIPLINE ----------
B07 Ionospheric Absorption-Method A1 (Pulse echo
STATION LATITUDE ---------- S 43.20
STATION LONGITUDE ---------- E 294.70
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Pulse Amplitude Measurements (A1)
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Bulletins or reports
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. I. Mesterman
Avenida del Libertador No. 327
Vicente Lopez
Argentina

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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USHUAIA
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ITEM: 812
DATE:00/00/75

32

DISCIPLINE ----------	B07 Ionospheric Absorption-Method A1 (Pulse echo)
STATION LATITUDE ----------	S 54.80
STATION LONGITUDE ----------	E 291.70
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Pulse Amplitude Measurements (A1)
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	*MONTHS*
FORM OF REDUCED DATA ----------	Bulletins or reports
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. I. Mesterman Avenida del Libertador No. 327 Vicente Lopez Buenos Aires Argentina
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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B08 Ionospheric Abso

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AHMEDABAD
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ITEM: 734
DATE:00/00/75

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DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 23.01
STATION LONGITUDE	E 72.60
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2), 21.3 MHz
RAW DATA	Strip charts
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip charts, tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Ram Gopal Rastogi Physical Research Laboratory Navrangpura Ahmedabad Gujarat India 380009
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ANDOYA

ITEM: 18
DATE:05/05/75

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sorption - Method A2 (Riometer)

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ANGMAGSSALIK
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ITEM: 721
DATE:00/00/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 65.61
STATION LONGITUDE	E 322.34
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2)
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip chart
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Viggo Neble Jensen Ionosphere Lab, Building 349 Technical University of Denmark Lyngby Denmark DK
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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AUCKLAND
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ITEM: 808
DATE:00/00/75

B08 Ionospheric Absorption-Method A2 (Riometer)

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ANDOYA
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ITEM: 18
DATE:05/05/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 69.29
STATION LONGITUDE ---------- E 16.02
ALTERNATE NAMES ---------- Oksebasen
DATES OF OPERATION ---------- 08/1962 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Riometer, 27.6 MHz, 3 element Yagi-antenna, vertical observation direction. Operating on a 24 h basis. Paper chart speed 1.5 inch/h.
RAW DATA ---------- Paper chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 0.5 MONTHS
FORM OF REDUCED DATA ---------- Paper
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DAA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Andoya Rocket Range
NTNF, Space Activity Division
Wdm. Thranesgt. 98
Oslo
Norway 1

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Operating on a 24 hour basis since 01/1969. New Riometer installed 03/1972. Special purpose data available after 1 day.

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AUCKLAND

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ITEM: 808

DATE: 00/00/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	S 37.00
STATION LONGITUDE	E 175.00
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2)
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. John E. Titheridge Radio Research Centre, U of Auckland Private Bag Auckland New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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B08 Ionospheric Absorptio

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BEAR ISLAND
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ITEM: 709
DATE:00/00/75

DISCIPLINE ----------	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ----------	N 74.50
STATION LONGITUDE ----------	E 19.20
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Riometer (A2)
RAW DATA ----------	Strip chart, pen and ink
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -------	Mr. Ove Bratteng Auroral Obs, Univ of Tromso P.O. Box 953 Tromso Norway N-9001
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	Copies of data on request, limited by our capacity.

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ITEM: 55

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tion - Method A2 (Riometer) (Cont.)

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BEVERIDGE
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ITEM: 772
DATE:00/00/75

DISCIPLINE ----------	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ----------	S 37.47
STATION LONGITUDE ----------	E 144.93
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Riometer (A2)
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Strip chart
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. Keith D. Cole Department of Physics La Trobe University Bundoora Victoria Australia 3083
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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BRUXELLES
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ITEM: 703
DATE:00/00/75

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BELSK

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ITEM: 55

DATE:03/06/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 51.84
STATION LONGITUDE	E 20.79
ALTERNATE NAMES	
DATES OF OPERATION	05/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer Mark 1000 by Aerospace Research Inc. with the 3-element Yagi antenna directed vertically. The strip chart recorder chart speed is 6 cm/h. Riometer working frequency 27.6 MHz.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables, plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. W. Wernik Inst. of Geophysics, Polish Acad. Sc ul. Pasteura 3, P.O. Box 155 Warsaw Poland 00-973
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Reduced data will become available after 11/1975. Tables and plots of the hourly mean absorption, absorption in the first min. of each hour and the maximum absorption for each hour as well as USIDO information will be available.

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BRUXELLES

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ITEM: 703

DATE:00/00/75

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DISCIPLINE ----------	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ----------	N 50.50
STATION LONGITUDE ----------	E 4.20
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Riometer (A2), 27 MHz
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. Lucien G. A. Bossy Inst Royal Meteorologique, Geophys Ext 3, Avenue Circulaire Bruxelles Belgium 1180
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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B08 Ionospheric Absorptio

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CASEY
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ITEM: 90
DATE:31/03/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	S 66.29
STATION LONGITUDE	E 110.53
ALTERNATE NAMES	Wilkes
DATES OF OPERATION	03/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionospheric absorption measurement. IPS 30 MHz riometer. 30 MHz solid state riometer in continuous operation. Chart speed 6 cm/h.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Computer printout
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Assistant Secretary Ionospheric Prediction Service P.O. Box 702 Darlinghurst N.S.W. Australia 2010
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data are usually available after 14 months.

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CHATANIKA

ITEM: 106
DATE:05/06/75

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tion - Method A2 (Riometer) (Cont.)

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COLLEGE
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ITEM: 203
DATE:05/06/75

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DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 64.87
STATION LONGITUDE	E 212.18
ALTERNATE NAMES	
DATES OF OPERATION	1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Dorsett 30 MHz Riometer, continuous recording at 3 inch/h on strip chart.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Archives Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of University of Alaska N-S meridian chain th Fairbanks.

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ITEM: 722

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CHATANIKA
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ITEM: 106
DATE:05/06/75

3b

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 65.10
STATION LONGITUDE ---------- E 212.57
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1974 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Chivers Riometer-30 MHz, continuous chart recording 3 inch/h
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Robert D. Hunsucker
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Dr. Hugh Chivers, Dept. of Applied Phy
University of California
P.O. Box 109
La Jolla CA
USA 92037

ADDITIONAL COMMENTS ----- *Records retained by Hugh Chivers, Univ. of Calif. at San Diego.*

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DANMARKSHAVN
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ITEM: 722
DATE: 00/00/75 3

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 76.77
STATION LONGITUDE ---------- E 341.37
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Riometer (A2)
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Strip chart
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Viggo Neble Jensen
Ionosphere Lab, Building 349
Technical University of Denmark
Lyngby
Denmark DK

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS -------

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193

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B08 Ionospheric Absorptio

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DAVIS
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ITEM: 135
DATE:06/06/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- S 68.58
STATION LONGITUDE ---------- E 77.96
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1974 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Fast response Riometer, Cosmic noise absorption pulsations. Wide-band 31-35 MHz, receives occasional radio station interference and loses long-term variations in differentiation, but shows CNA pulsations. Only tapes showing good events are kept.
RAW DATA ---------- Recorded on triple-play tape together with time code Z and VLF.
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Paper tape, photographic prints, graphical plots
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Director
Antarctic Division
568 St. Kilda Rd.
Melbourne Victoria
Australia 3004

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Equipment is experimental, used to search for CNA and correlated pulsations. Special purpose data are available after 18 months.

ion - Method A2 (Riometer) (Cont.)

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DAVIS
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ITEM: 136
DATE:06/06/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- S 68.58
STATION LONGITUDE ---------- E 77.96
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 02/1969 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Standard Riometer. Continuous (recording measurement) of ionospheric opacity at 33 MHz. Solid state, UDC number 551.510. 53:551. 508-THE RIOMETER: A STATE-OF-THE-ART-DESIGN, features transistor noise source and integrated IC OPAMPS, CMOS Gates, calibrated automatically daily.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Director
Antarctic Division, Dept. of Sci.
568 St. Kilda Rd.
Melbourne Victoria
Australia 3004

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- PCA reported to Ionospheric Prediction Service Division, Sydney.

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DJIBOUTI
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ITEM: 150
DATE:17/02/76

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DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 11.52

ision, Sydney.

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DJIBOUTI

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ITEM: 150

DATE:17/02/76

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 11.52
STATION LONGITUDE ---------- E 42.83
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1969 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Mark 2 Riometer AR1-100 C, 10 cm/h. Riometer no. 1 at 20 MHz; no. 2 at 35 MHz.
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Monsieur le chef du dept. TMA/MIR
CNET
Route de Tregastel
Lannion
France 22301

ADDRESS FOR INFORMATION ABOUT DATA -------- *Same as above*
ADDITIONAL COMMENTS -----

194

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B08 Ionospheric Absorption

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DOURBES
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ITEM: 702
DATE:00/00/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 50.10
STATION LONGITUDE	E 4.60
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2)
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Lucien G. A. Bossy Inst Royal Meteorologique, Geophys Ext 3, Avenue Circulaire Bruxelles Belgium 1180
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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FORT YUKON

ITEM: 175
DATE:10/06/75

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ption - Method A2 (Riometer) (Cont.)

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GENERAL BELGRANO
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ITEM: 910
DATE:02/06/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2(Riometer)
STATION LATITUDE	S 77.97
STATION LONGITUDE	E 321.20
ALTERNATE NAMES	Belgrano Gral Belgrano
DATES OF OPERATION	06/1962 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	
RAW DATA	Strip charts
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Horacio A. Cazeneuve Instituto Antartico Argentino Cerrito 1248 Buenos Aires Argentina
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 4 months. Data are published by Instituto Antartico Argentino as Scientific Contributions.

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GODHAVN

ITEM: 725
DATE:00/00/75

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FORT YUKON
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ITEM: 175
DATE:10/06/75

DISCIPLINE ----------
B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 66.56
STATION LONGITUDE ---------- E 214.78
ALTERNATE NAMES ----------
DATES OF OPERATION ---------
03/1961 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- A.R.I. 30 MHz Riometer. Continuous chart recordings 3 inch/h
RAW DATA ----------
Strip chart
DATA REDUCTION PRACTICE ---------- , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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GODHAVN
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ITEM: 725
DATE: 00/00/75

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DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 69.30
STATION LONGITUDE	E 306.17
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2)
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip chart
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Viggo Neble Jensen Ionosphere Lab, Building 349 Technical University of Denmark Lyngby Denmark DK
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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195

B08 Ionospheric Absorpti

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GODTHAB
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ITEM: 723
DATE: 00/00/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 64.19
STATION LONGITUDE ---------- E 308.27
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Riometer (A2)
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER -------- MONTHS
FORM OF REDUCED DATA ---------- Strip chart
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Viggo Neble Jensen
Ionosphere Lab, Building 349
Technical University of Denmark
Lyngby
Denmark DK

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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ITEM: 228

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tion - Method A2 (Riometer) (Cont.)

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HERMANUS
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ITEM: 245
DATE:18/04/75

DISCIPLINE ----------	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ----------	S 34.42
STATION LONGITUDE ----------	E 19.22
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	12/1962 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Mark II Riometer (model ARI-100C), continuous recording of 30 MHz cosmic radio noise, chart speed 3 inches/h, participation in AFGL network 12/1962-6/1970.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Magnetic Observatory (CSIR) PO Box 32 Hermanus Rep of So Africa 7200
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Records used inter alia for confirmation of geomagnetic solar flare effects (SFEs).

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SIPAISO

ITEM: 260
DATE:12/02/76

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HALLEY BAY
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ITEM: 228
DATE: 20/06/75 ba

DISCIPLINE ----------
B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- S 75.52
STATION LONGITUDE ---------- E 333.37
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1972 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- David Andersen type DA-87 Riometer, continuous measure of cosmic noise at 27.6 MHz. Instrument similar to IGY riometer (Little and Leinbach, Proc. I.R.E., Vol 47, 2(1959)). Chart speed 1 or 2 inch/h. Antenna 3 element Yagi directed at South celestial pole.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Computer printout
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Slough, England
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. J. R. Dudeney
British Antarctic Survey, Appleton L
Ditton Park
Slough Bucks
England SL3 9JX

ADDRESS FOR INFORMATION ABOUT DATA -------- World Data Centre - C1
Appleton Laboratory
Ditton Park
Slough Bucks
England SL3 9JX

ADDITIONAL COMMENTS ----- Regularly scheduled data normally available after 8-12 months (processed in yearly batches).

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HIRAISO

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ITEM: 260

DATE:12/02/76

DISCIPLINE ----------

B08 Ionospheric Absorption-Method A2 (Riometer)

STATION LATITUDE ---------- N 36.37

STATION LONGITUDE ---------- E 140.63

ALTERNATE NAMES ----------

DATES OF OPERATION --------- 04/1964 to present

OBSERVING SCHEDULE --------- Regular

INSTRUMENT DESCRIPTION ----- Riometer

RAW DATA ----------

DATA REDUCTION PRACTICE ---------- Special

REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS

FORM OF REDUCED DATA ---------- Table (complete table of SIDs is published 1-5 years later)

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Mr. Fujio Yamashita
Hiraiso Branch
Radio Research Laboratories
Nakaminato Ibaraki
Japan 311-12

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS ----- Special purpose data available after 1 month.

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B08 Ionospheric Absorptio

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INUVIK
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ITEM: 278 6
DATE:05/06/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 68.25
STATION LONGITUDE ---------- E 226.70
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 08/1969 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Dorsett 30 MHz Riometer, continuous recording on 4 inch/h strip chart.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Part of University of Alaska N-S meridian chain through Fairbanks.

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ITEM: 720

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- Method A2 (Riometer) (Cont.)

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KERGUELEN
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ITEM: 303
DATE:27/01/76

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	S 49.35
STATION LONGITUDE	E 70.27
ALTERNATE NAMES	Port aux Francais
DATES OF OPERATION	02/1962 (30 MHz) to present 01/1975 station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Aerospace Riometers, continuous recording on chart and magnetic tape (30, 25, 20.5 and 15 MHz)
RAW DATA	Strip chart, digital magnetic tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables of absorption values every 5 minutes (30 MHz)
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Monsieur le Dir. des Lab. Scientifique T.A.A.F. 27 rue Oudinot Paris France 75700
ADDRESS FOR INFORMATION ABOUT DATA	Laboratoire de Geophysique Externe 4 Avenue de Neptune Saint Maur France 94100
ADDITIONAL COMMENTS	Station moved in January 1975 (former location S49.35 E70.24).

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ITEM: 313

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KAP TOBIN
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ITEM: 720
DATE:00/00/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 70.42
STATION LONGITUDE	E 338.03
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2)
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip chart
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Viggo Neble Jensen Ionosphere Lab, Building 349 Technical University of Denmark Lyngby Denmark DK
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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KIRUNA

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ITEM: 313

DATE:18/02/76

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 67.84
STATION LONGITUDE ---------- E 20.42
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 03/1958 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Riometer
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ---------- KIRUNA GEOPHYSICAL DATA
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Library
Kiruna Geophysical Institute
Kiruna
Sweden S-98101

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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B08 Ionospheric Absorptio

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LYCKSELE
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ITEM: 369
DATE:18/02/76

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 64.62
STATION LONGITUDE ---------- E 18.67
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Riometer (A2)
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Ove Klang
Ionospheric Observatory
Box 100
Lycksele
Sweden S-92100

ADDRESS FOR INFORMATION ABOUT DATA -------- Library
Kiruna Geophysical Institute
Kiruna Sweden
S-981 01

ADDITIONAL COMMENTS -----

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ITEM: 374

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tion - Method A2 (Riometer) (Cont.)

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MAWSON
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ITEM: 690
DATE:31/03/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- S 67.60
STATION LONGITUDE ---------- E 62.88
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- IPS 30 MHz riometer, ionospheric absorption measurement, 30 MHz solid state riometer in continuous operation, chart speed 6 cm per hour
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Computer printout
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Assistant Secretary
Ionospheric Prediction Service
Box 702, P.O.
Darlinghurst N.S.W.
Australia 2010

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 14 months.

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ITEM: 1100
DATE:12/01/76

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MACQUARIE ISLAND

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ITEM: 374
DATE:06/06/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- S 54.50
STATION LONGITUDE ---------- E 158.95
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1964 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Narrow band 30 MHz Riometer (Standard), Australian Antarctic Division design. Double dipole antenna directed at zenith, calibrated noise source switched once daily. Chart speed 6 cm/h.

RAW DATA ---------- Chart rolls
DATA REDUCTION PRACTICE ---------- Special , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Director
Antarctic Division
568 St Kilda Road
Melbourne Victoria
Australia 3004

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- *Special purpose data available after 18 months.*

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MCMATH-HULBERT

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ITEM: 1100
DATE:12/01/76

DISCIPLINE ----------	B08 Ionospheric Absorption-Method A2 (Riometer)	
STATION LATITUDE ----------	N 42.66	
STATION LONGITUDE ----------	E 276.74	
ALTERNATE NAMES ----------		
DATES OF OPERATION ----------	08/1957 to present	
OBSERVING SCHEDULE ----------		
INSTRUMENT DESCRIPTION -----	Riometer	
RAW DATA ----------		
DATA REDUCTION PRACTICE ----------	Regular , Special	
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS	
FORM OF REDUCED DATA ----------		
DATA ROUTINELY PUBLISHED ----------		
DATA SENT TO WDC-A ----------	Yes	
DATA SENT TO WDC-B ----------		
DATA SENT TO WDC-C ----------		
DATA AVAILABLE ON REQUEST ----------	Yes	
ADDRESS FOR INFORMATION ABOUT STATION -----	Orren C. Mohler McMath-Hulbert Observatory 895 Lake Angelus Road North Pontiac MI USA 48055	
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above	
ADDITIONAL COMMENTS -----	Special purpose data available after 3 months.	

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B08 Ionospheric Absorpti

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MOULD BAY
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ITEM: 411
DATE:05/06/75 8

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 76.20
STATION LONGITUDE ---------- E 240.60
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1973 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Chivers 30 MHz Riometer. Continuous chart recording - 3 inch/h.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Archives
Geophysical Institute
Univ of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------ Part of Univ of Alaska N-S meridian chain.

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NARSSARSSUAQ
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ITEM: 724
DATE:00/00/75

ption - Method A2 (Riometer) (Cont.)

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NORILSK
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ITEM: 864
DATE:00/00/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 69.00
STATION LONGITUDE	E 88.00
ALTERNATE NAMES	
DATES OF OPERATION	03/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2)
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Bulletins
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. N. M. Erofeev SibIZMIR P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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NY-ALESUND
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ITEM: 711
DATE:00/00/75

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NARSSARSSUAQ
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ITEM: 724
DATE:00/00/75

DISCIPLINE ----------	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ----------	N 61.20
STATION LONGITUDE ----------	E 314.60
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Riometer (A2)
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER --------	MONTHS
FORM OF REDUCED DATA ----------	Strip chart
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -------	Viggo Neble Jensen Ionosphere Lab, Building 349 Technical University of Denmark Lyngby Denmark DK
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS -------	

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NY-ALESUND

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ITEM: 711

DATE:00/00/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 79.00
STATION LONGITUDE	E 12.00
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2)
RAW DATA	Strip chart, pen and ink
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Magnetic tape
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Mr. Ove Bratteng Auroral Obs, Univ of Tromso P.O. Box 953 Tromso Norway N-9001
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Copies of data on request, limited by our capacity.

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B08 Ionospheric Absorpti

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NY-ALESUND
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ITEM: 718
DATE:00/00/75 9

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 79.00
STATION LONGITUDE	E 12.00
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2)
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip chart
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Viggo Neble Jensen Ionosphere Lab, Building 349 Technical University of Denmark Lyngby Denmark DK
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ONDREJOV
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ITEM: 803
DATE:00/00/75 10

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ion - Method A2 (Riometer) (Cont.)

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POKER FLAT
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ITEM: 466
DATE:05/06/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 65.13
STATION LONGITUDE	E 212.52
ALTERNATE NAMES	
DATES OF OPERATION	11/1971 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	A.R.I. 30 MHz Riometer, continuous chart recording 3inch/h.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Archives Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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SACHS HARBOR
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ITEM: 494
DATE:10/06/75

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ITEM: 803 10

DATE: 00/00/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 49.92
STATION LONGITUDE	E 14.98
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2) at 29 MHz
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. L. Krivsky Astronomical Institute Ondrejov Czechoslovakia 25165
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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SACHS HARBOR

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ITEM: 494
DATE:10/06/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 72.00
STATION LONGITUDE	E 235.00
ALTERNATE NAMES	
DATES OF OPERATION	08/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Chivers 30 MHz Riometer, continuous chart recording at 3 inch/h.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Archives Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station is part of University of Alaska N-S chain thru Fairbanks.

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B08 Ionospheric Absorptio

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ITEM: 527
DATE:25/06/75

DISCIPLINE ----------	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ----------	S 70.31
STATION LONGITUDE ----------	E 357.64
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	05/1964 to present Station moved Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Riometer. 30 MHz double dipole antenna and 20 MHz double dipole antenna. Aerospace Research Inc. Riometers. Started 07/1974: 30 MHz fast response crossed dipole antenna.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Cosmic Ray Research Unit Department of Physics Potchefstroom Univ for CHE Potchefstroom South Africa 2520
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ion - Method A2 (Riometer) (Cont.)

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SONDRE STROMFJORD
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ITEM: 719
DATE:00/00/75

DISCIPLINE	B03 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 67.00
STATION LONGITUDE	E 310.00
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2)
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip chart
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Viggo Neble Jensen Ionosphere Lab, Building 349 Technical University of Denmark Lyngby Denmark DK
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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SOUTH POLE
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ITEM: 569
DATE:13/03/75

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SAO PAULO
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ITEM: 758
DATE:00/00/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- S 23.50
STATION LONGITUDE ---------- E 313.50
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Riometer, 30 MHz
RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER -------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter, strip charts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Centro de Radio Astronomia e Astrofisi
C.P. 8792
Sao Paulo
Brazil 01222

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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SOUTH POLE
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ITEM: 569
DATE:13/03/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- S 90.00
STATION LONGITUDE ---------- E 0.
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1963 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Riometer observations on 30 and 50 MHz. Solid state riometers, operated continuously, calibrated regularly. Strip charts 6 inch/h or 3 inch/h (has varied from time to time).

RAW DATA ---------- Paper strip charts
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Hourly values of ionospheric absorption, tabulated
DATA ROUTINELY PUBLISHED ---------- Contact World Data Center A or see their catalog
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Office of Polar Programs
National Science Foundation
1800 G Street NW
Washington DC
USA

ADDRESS FOR INFORMATION ABOUT DATA -------- WDC-A for Solar-Terrestrial Physics
NOAA, EDS, NGSDC
Boulder CO
USA 80302

ADDITIONAL COMMENTS ----- Data is brought out from South Pole to Boulder only once a year, usually arriving in Boulder in about March or April. Riometers are NOAA-owned, operated by scientific staff of the station. For specific questions about the riometers contact WDC-A.

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B08 Ionospheric Absorptio

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SYOWA
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ITEM: 586 IIa
DATE:25/03/75

DISCIPLINE ----------	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ----------	S 69.00
STATION LONGITUDE ----------	E 39.35
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	03/1966 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Mark II ARI 100 C. Absorption - Method A 2 (Riometer). 20, 30 and 50 MHz, continuously recording. Strip chart: 6 cm/hour.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	18 MONTHS
FORM OF REDUCED DATA ----------	Photographic paper
DATA ROUTINELY PUBLISHED ----------	JARE DATA REPORTS (IONOSPHERE), annually issued by National Science Museum (now Polar Research Institute)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	United Kingdom
ADDRESS FOR INFORMATION ABOUT STATION -----	Syowa Base (Japanese Antarctic Res Exp) Radio Research Laboratories 2-1. Nukui-Kitamachi 4-chome Tokyo Japan 184
ADDRESS FOR INFORMATION ABOUT DATA --------	Radio Wave Division Radio Research Laboratories 2-1, Nukui-Kitamachi 4-chome Koganei-shi Tokyo Japan 184
ADDITIONAL COMMENTS -----	Special purpose data usually available after 15 months.

ɔn - Method A2 (Riometer) (Cont.)

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TERRE ADELIE
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ITEM: 602
DATE:27/01/76

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	S 66.66
STATION LONGITUDE	E 140.02
ALTERNATE NAMES	Dumont dUrville
DATES OF OPERATION	01/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer, continuous recording of Absorption on chart and magnetic tape, on 75, 30.1, 20.5 and 13.7 MHz.
RAW DATA	Strip chart, digital magnetic tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	15 MONTHS
FORM OF REDUCED DATA	Tables of absorption values every 5 minutes (30.1 MHz)
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Directeur des Laboratoires Scientifiq T.A.A.F. 27 rue Oudinot Paris France 75700
ADDRESS FOR INFORMATION ABOUT DATA	Laboratoire de Geophysique Externe 4 Av de Neptune Saint Maur France 94100
ADDITIONAL COMMENTS	

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THORSHAVN
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ITEM: 717
DATE:00/00/75

B08 Ionospheric Absorption-Method A2 (Riometer)

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THORSHAVN

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ITEM: 717

DATE 00/00/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)

STATION LATITUDE ---------- N 62.03

STATION LONGITUDE ---------- E 353.24

ALTERNATE NAMES ----------

DATES OF OPERATION ----------

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ------- Riometer (A2)

RAW DATA ---------- Strip chart

DATA REDUCTION PRACTICE ----------

REGULAR REDUCED DATA AVAILABLE AFTER -------- MONTHS

FORM OF REDUCED DATA ---------- Strip chart

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ----------

ADDRESS FOR INFORMATION ABOUT STATION -------

Viggo Neble Jensen
Ionosphere Lab, Building 349
Technical University of Denmark
Lyngby
Denmark DK

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above

ADDITIONAL COMMENTS -------

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B08 Ionospheric Absorptio

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ITEM: 726
DATE:00/00/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 77.50
STATION LONGITUDE	E 290.80
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer (A2)
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip chart
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Viggo Neble Jensen Ionosphere Lab, Building 349 Technical University of Denmark Lyngby Denmark DK
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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TORINO
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ITEM: 751
DATE:00/00/75

ption - Method A2 (Riometer) (Cont.)

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TROMSO
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ITEM: 706
DATE:00/00/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 69.70
STATION LONGITUDE	E 19.00
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer
RAW DATA	Strip charts, pen and ink
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip charts, pen and ink
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Mr. Ove Bratteng Auroral Obs, Univ of Tromso P.O. Box 953 Tromso Norway N-9001
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Copies of data on request, limited by our capacity

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UPICE
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ITEM: 798
DATE:00/00/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)

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TORINO
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ITEM: 751
DATE: 00/00/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)	
STATION LATITUDE	N 45.05	
STATION LONGITUDE	E 7.75	
ALTERNATE NAMES		
DATES OF OPERATION		
OBSERVING SCHEDULE	Regular	
INSTRUMENT DESCRIPTION	Riometer (A2)	
RAW DATA		Strip charts
DATA REDUCTION PRACTICE		
REGULAR REDUCED DATA AVAILABLE AFTER		MONTHS
FORM OF REDUCED DATA		Photographs
DATA ROUTINELY PUBLISHED		
DATA SENT TO WDC-A		
DATA SENT TO WDC-B		
DATA SENT TO WDC-C		
DATA AVAILABLE ON REQUEST		
ADDRESS FOR INFORMATION ABOUT STATION		Ing. Giovanni E. Perona Inst di Elettronica, Politecnico Tor Cs. Duca degli Abruzzi 24 Torino Italy
ADDRESS FOR INFORMATION ABOUT DATA		Same as above
ADDITIONAL COMMENTS		

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UPICE

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ITEM: 798

DATE:00/00/75

DISCIPLINE ---------- B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ---------- N 50.30
STATION LONGITUDE ---------- E 16.01
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Riometer (A2) at 29 MHz
RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. L. Krivsky
Astronomical Institute
Ondrejov
Czechoslovakia 25165

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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B08 Ionospheric Absorptio

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ITEM: 650
DATE:11/07/5

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)	
STATION LATITUDE	N	59.80
STATION LONGITUDE	E	17.60
ALTERNATE NAMES		
DATES OF OPERATION	07/1962 to present	
OBSERVING SCHEDULE	Regular	
INSTRUMENT DESCRIPTION	Riometer, ionospheric absorption, frequency 27.6 MHz, swept receiver 100 kHz search band minimum detector 3-element Yagi antenna. Analog output on strip chart recorder, 20 mm per hour.	
RAW DATA		Strip chart
DATA REDUCTION PRACTICE		None
REGULAR REDUCED DATA AVAILABLE AFTER		MONTHS
FORM OF REDUCED DATA		
DATA ROUTINELY PUBLISHED		
DATA SENT TO WDC-A		
DATA SENT TO WDC-B		
DATA SENT TO WDC-C		
DATA AVAILABLE ON REQUEST		Yes
ADDRESS FOR INFORMATION ABOUT STATION		Mr. Harald Derblom Uppsala Ionospheric Observatory Uppsala 1 Sweden S-755 90
ADDRESS FOR INFORMATION ABOUT DATA		Same as above
ADDITIONAL COMMENTS		

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ITEM: 813
DATE:00/00/75

on - Method A2 (Riometer) (Cont.)

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VOSTOK
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ITEM: 662
DATE:06/03/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	S 78.45
STATION LONGITUDE	E 106.87
ALTERNATE NAMES	
DATES OF OPERATION	12/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometers, riometer observations on 30 and 50 MHz. Riometers operate continuously, calibrated irregularly. Strip chart run at 6 or 3 inch/h. (Has varied from time to time).
RAW DATA	Paper strip charts
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Hourly values of ionospheric absorption from strip charts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Office of Polar Programs National Science Foundation 1800 G Street NW Washington D.C. USA
ADDRESS FOR INFORMATION ABOUT DATA	WDC-A for Solar-Terrestrial Physics NOAA Boulder CO USA 80302
ADDITIONAL COMMENTS	Data are brought out from the Antarctic only once per year. It usually arrives in Boulder in about March or April for the previous year. Riometers at the Russian station at Vostok were provided by NOAA and are operated by the American exchange scientist at the station, or by the Russian scientists in the absence of an American exchange scientist.

ADDITIONAL COMMENTS ------

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ITEM: 813

DATE: 00/00/75

DISCIPLINE ----------	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE ----------	S 54.80
STATION LONGITUDE ----------	E 291.70
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Riometer (A2)
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Bulletins or reports
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. I. Mesterman Avenida del Libertador No. 327 Vicente Lopez Buenos Aires Argentina
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above

ADDITIONAL COMMENTS ------

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B08 Ionospheric Absorptio

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WALLOPS ISLAND
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ITEM: 1069
DATE: 20/02/75

DISCIPLINE	B08 Ionospheric Absorption-Method A2 (Riometer)
STATION LATITUDE	N 37.94
STATION LONGITUDE	E 284.53
ALTERNATE NAMES	
DATES OF OPERATION	07/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Dorsett Mod 25/41 Riometer recording continuously on strip chart at one h/3 inch (76.5 mm) of chart, set on GMT (UTC) time.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Robert S. Gray, Sr. NOAA Ionosphere Sounding Obs, BLdg E-144 NASA Wallops Station Wallops Island VA USA 23337
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 1 day. Real time information available on request.

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B09 Ionospheric Absorption

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ITEM: 6 1a
DATE:20/03/75

DISCIPLINE ----------	B09 Ionospheric Absorption-Method A3 (CW Field-Strength)
STATION LATITUDE ----------	N 39.73
STATION LONGITUDE ----------	E 140.14
ALTERNATE NAMES ----------	Ak. 539
DATES OF OPERATION ----------	01/1964 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	HF Receiver, 2.5 and 5 MHz, strip chart at 20 mm/hour.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Unknown
DATA SENT TO WDC-B ----------	Unknown
DATA SENT TO WDC-C ----------	Unknown
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Akita Radio Wave Observatory Radio Research Laboratories 6-1, Tegata-Sumiyoshi-cho Akita-shi Akita-ken Japan 010
ADDRESS FOR INFORMATION ABOUT DATA --------	Radio Wave Division Radio Research Laboratories 2-1, Nukui-Kitamachi 4-chome Koganei-shi Tokyo Japan 184

ADDITIONAL COMMENTS -----

Special purpose data available after 1 month.

...n - Method A3 (CW Fieldstrength)

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ITEM: 143
DATE:15/05/75

DISCIPLINE ---------- B09 Ionospheric Absorption-Method A3 (CW Fieldstrength)
STATION LATITUDE ---------- N 52.10
STATION LONGITUDE ---------- E 5.18
ALTERNATE NAMES ---------- Royal Netherlands Met Inst
DATES OF OPERATION ---------- 07/1968 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Receiver developed and calibrated at De Bilt. Calibration by means of values during the night. Fieldstrength records of the German transmitter Nordeich, situated at 210 km distance NE of De Bilt.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 10 MONTHS
FORM OF REDUCED DATA ---------- Tables with hourly values of absorption
DATA ROUTINELY PUBLISHED ---------- Monthly bulletin, Ionospheric and Geomagnetic data, Royal Netherlands Meteorological Institute, De Bilt
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Director, Geophysical Division
Royal Netherlands Meteorological Inst
Utrechtse Weg
De Bilt
Netherlands

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Because the transmitter changed its type of modulation, observations terminated, 16/05/1973.

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DOLGOSCHELIE
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ITEM: 794
DATE:00/00/75

DISCIPLINE ---------- B09 Ionospheric Absorption-Method A3 (CW Fieldstrength)
STATION LATITUDE ---------- N 66.03
STATION LONGITUDE ---------- E 43.24

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Because the transmitter changed its type of modulation, observations terminated, 16/05/1973.

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DOLGOSCHELIE

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ITEM: 794
DATE:00/00/75

DISCIPLINE ---------- B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ---------- N 66.03
STATION LONGITUDE ---------- E 43.24
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ CW Fieldstrength (A3)
RAW DATA ---------- Magnetic tape, strip chart
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------- Dr. Jacques Vigneron
Groupe de Recherches Ionospheriques
Centre National dEtudes des Telecom.
Saint Maur
France 94100

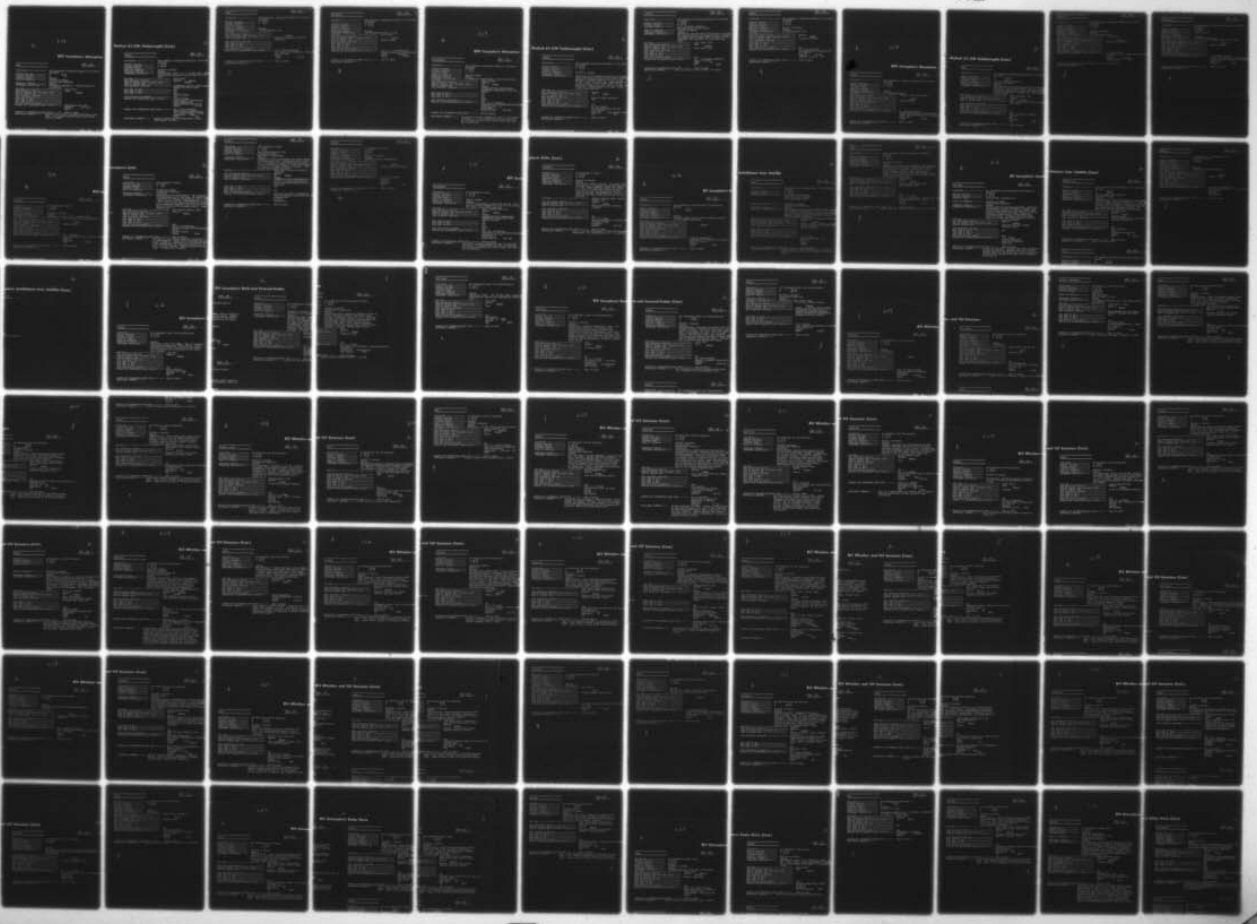
ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

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B09 Ionospheric Absorption -

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ITEM: 624
DATE:06/06/75

DISCIPLINE ----------	B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ----------	N 40.82
STATION LONGITUDE ----------	E .49
ALTERNATE NAMES ----------	Tortosa
DATES OF OPERATION ----------	09/1967 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Ionospheric Absorption - field strength A3, continuously
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Observatorio del Ebro Roquetas Tarragona Spain
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	Operated from 9/1967 to 8/1969 and 8/1970 to present. For original records send to Max Planck Institut Lindau.

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ITEM: 748

- Method A3 (CW Fieldstrength) (Cont.)

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HIRAISO
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ITEM: 261
DATE:20/03/75

DISCIPLINE ---------- B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ---------- N 36.37
STATION LONGITUDE ---------- E 140.63
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Fieldstrength meter, 10, 15, 20 MHz (WWV + WWVH) continuously recording on strip chart at 6-12 cm/h.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ---------- IONOSPHERIC DATA IN JAPAN issued monthly by RRL (15 MHz)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
United Kingdom
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Hiraiso Branch
Radio Research Laboratories
3603 Isozaki-machi
Nakaminato-shi Ibaraki-Ken
Japan 311-12

ADDRESS FOR INFORMATION ABOUT DATA -------- WDC C2 for Ionosphere
Radio Research Laboratories
2-1, Nukui-Kitamachi 4-chome
Koganei-shi Tokyo
Japan 184

ADDITIONAL COMMENTS ----- Special purpose data available after 1 month.
CCIR Network (15 MHz).

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GENOVA
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ITEM: 748 2a
DATE:00/00/75

DISCIPLINE ----------	B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ----------	N 44.55
STATION LONGITUDE ----------	E 8.95
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	CW Fieldstrength (A3)
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Monthly and annual bulletins, microfilm
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. Mario Bossolasco Ist. Geofisico e Geodetico, Genoa Un P.O. Box 3145 Genoa Italy I-16100
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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KODAIKANAL
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ITEM: 766
DATE:00/00/75

DISCIPLINE ---------- B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ---------- N 10.20
STATION LONGITUDE ---------- E 77.50
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ CW Fieldstrength (A3), 6.2 MHz
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. J. C. Bhattacharyya
Indian Institute of Astrophysics
Hebbal Bangalore
India 560006

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS -----

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B09 Ionospheric Absorption -

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KUHLUNGSBORN
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ITEM: 325
DATE:11/08/75 2d

DISCIPLINE ----------	B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ----------	N 54.12
STATION LONGITUDE ----------	E 11.77
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1948 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	A3 absorption measurements, continuous records.
RAW DATA ----------	Paper records
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/2 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	GEOPHYSIKALISCHE BEOBACHTUNGS-ERGEBNISSE (Geophysical Data) HHI monthly
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes Tokyo
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. Dr. K. Sprenger Observatorium fur Ionospharenforschung Mitschurin Str. 4-6 Kuhlungsborn German Dem Rep DDR 2565
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above

ADDITIONAL COMMENTS ----- The monthly bulletin (Geophysical Data) is available from Akad. d. Wissenschaften der DDR, Zentralinstitut fur solar-terrestrische Physik (HHI), DDR 1199 Berlin-Adlershof.

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- Method A3 (CW Fieldstrength) (Cont.)

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LUECHOW
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ITEM: 364
DATE:12/02/76

DISCIPLINE ----------	B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ----------	N 53.00
STATION LONGITUDE ----------	E 11.20
ALTERNATE NAMES ----------	
DATES OF OPERATION ---------	01/1970 to present
OBSERVING SCHEDULE ---------	
INSTRUMENT DESCRIPTION -----	Continuous Field Strength recordings of distant radio transmitters obtained with highly directiv antennas. Canada-Germany on 22.378, 17.084, 12.813, 8.542, and 6.425 MHz. Japan-Germany on 22.770, 18.220, 13.597, 9.970 and 3.622 MHz. Australia-Germany on 19.690, 13.920, 11.030, and 5.100 MHz. Africa-Germany on 22.617, 17.031, 13.034, and 8.626 MHz.
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	.25 MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	Monthly report available
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Th. Dambolt Forschungs Institut der DBP P.O. Box 800 Darmstadt West Germany (FRG) FRG 6100
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ITEM: 367

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LA POSTA
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ITEM: 988
DATE:15/05/75

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DISCIPLINE ----------	B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ----------	N 32.40
STATION LONGITUDE ----------	E 243.50
ALTERNATE NAMES ----------	OL C, 12 Weather Squadron Navy Electronic Lab Cen (NELC)
DATES OF OPERATION ----------	10/1970 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Observatory operates daily from sunrise to sunset and monitors 6 very low frequency (VLF) receivers for Sudden Phase Anomaly (SPA), monitors 5 high frequency (HF) receivers for Short Wave Fade (SWF).
RAW DATA ----------	Logs, chart rolls
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	OL C, 12th Weather Squadron Route 1, Box 591 Campo CA USA 92006
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data are regularly sent to NELC, San Diego.

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LUNPING
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ITEM: 367
DATE:10/02/76

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DISCIPLINE ---------- B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ---------- N 25.00
STATION LONGITUDE ---------- E 121.17
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1973 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- CW Field Strength (A3)
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Yinn-Nien Huang
Telecommunication Laboratories
P.O. Box 71
Chung-Li Taiwan
Republic of China 320

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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B09 Ionospheric Absorption -

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MAWSON
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ITEM: 793
DATE:00/00/75

DISCIPLINE ---------- B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ---------- S 67.60
STATION LONGITUDE ---------- E 62.90
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ CW Fieldstrength(A3)
RAW DATA ---------- Magnetic tape, strip chart
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Jacques Vigneron
Groupe de Recherches Ionospheriques
Centre National dEtudes des Telecom.
Saint Maur
France . 94100

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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- Method A3 (CW Fieldstrength) (Cont.)

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RAMEY
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ITEM: 1124
DATE:15/05/75

DISCIPLINE ----------	B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ----------	N 18.52
STATION LONGITUDE ----------	E 292.90
ALTERNATE NAMES ----------	OL D 12 Weather Squadron
DATES OF OPERATION ----------	08/1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Yagi antenna for monitoring satellite beacons t determine total electron count; monitors 5 high frequency receivers for short wave fade (SWF) a 2 very low frequency receivers for sudden phase anomaly (SPA).
RAW DATA ----------	Film, drawings, logs
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Film, photographic prints, graph cal plots
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	OL D, 12 Weather Squadron Box 261 FPO New York USA 09549
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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PANSKA VES
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ITEM: 822
DATE:00/00/75 4 a

DISCIPLINE	B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE	N 50.53
STATION LONGITUDE	E 14.57
ALTERNATE NAMES	
DATES OF OPERATION	01/1961 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	CW Fieldstrength (A3)
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Bulletins, microfilm
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Pavel Triska Geophysical Inst, Czechoslovak Acad Sc Bocni II Praha 4 Sporilov Czechoslovakia 141 31
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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TERRE ADELIE

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ITEM: 792

DATE:00/00/75 4C

DISCIPLINE ---------- B09 Ionospheric Absorption-Method A3 (CW Field-strength)

STATION LATITUDE ---------- S 66.40

STATION LONGITUDE ---------- E 140.01

ALTERNATE NAMES ---------- Dumont dUrville

DATES OF OPERATION ----------

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ------ CW Fieldstrength (A3)

RAW DATA ---------- Magnetic tape, strip chart

DATA REDUCTION PRACTICE ----------

REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS

FORM OF REDUCED DATA ---------- Tabular matter

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ----------

ADDRESS FOR INFORMATION ABOUT STATION ------

Dr. Jacques Vigneron
Groupe de Recherches Ionospheriques
Centre National dEtudes des Telecom.
Saint Maur
France 94100

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above

ADDITIONAL COMMENTS ------

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B09 Ionospheric Absorption -

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WALLOPS ISLAND
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ITEM: 1070
DATE:20/02/75

DISCIPLINE ----------	B09 Ionospheric Absorption-Method A3 (CW Field-strength)
STATION LATITUDE ----------	N 37.94
STATION LONGITUDE ----------	E 284.53
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1963 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Field strength recorded on strip chart, EST time
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables, graphical plots
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Robert S. Gray, Sr. NOAA Ionosphere Sounding Obs, Bldg E-1 NASA Wallops Station Wallops Island VA USA 23337
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available after 1 day. Real time information available on request.

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20/02/75

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ASHKHABAD
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ITEM: 845
DATE:00/00/75 /a

DISCIPLINE	B10 Ionospheric Drifts
STATION LATITUDE	N 37.93
STATION LONGITUDE	E 58.37
ALTERNATE NAMES	
DATES OF OPERATION	01/1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionospheric Drift 1-10 MHz, hourly values
RAW DATA	35 mm film of continuous records
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. G. Gemilev Inst Phys Earth & Atm, Acad Sci Turkm Gogol 16 Ashkhabad USSR 744019
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ITEM: 144

onospheric Drifts

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GARCHY
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ITEM: 188
DATE:09/03/76 /

DISCIPLINE	B1Ø Ionospheric Drifts
STATION LATITUDE	N 47.28
STATION LONGITUDE	E 3.07
ALTERNATE NAMES	
DATES OF OPERATION	Ø1/1966 to present Intermittent operation
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Ionospheric Drift Measurements. Two versions: (1)Measurements on 2.1 MHz using the fading technique with 36 antennas, recorded on film, 2 min/ - power output 2 kW and (2)Measurements on 1.35, 2.25, 3.15, 4.05 kHz using the method of fadings with 9 antennas recording 2 min/h on the 4 frequencies following the European program - power output 1Ø kW.
RAW DATA	Film, analog magnetic tape
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Station Ionospherique Centre de Recherches Geophysiques Garchy Pouilly s/Loire France 58150
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	From 1966 to 1973 regular permanent recording on 2.1 MHz frequency. After 1973, recordings during 4 annual periods in connection with the European program of Measurement of Ionospheric Winds on 1.35, 2.25, 3.15 and 4.05 MHz. Special purpose data usually available after 3 months.

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ITEM: 862
DATE:00/00/75

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DE BILT
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ITEM: 144
DATE:15/05/75

DISCIPLINE	B1Ø Ionospheric Drifts
STATION LATITUDE	N 52.1Ø
STATION LONGITUDE	E 5.18
ALTERNATE NAMES	Royal Netherlands Met Inst
DATES OF OPERATION	Ø1/1969 to present Ø8/72-Ø9/72 intermittent
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionospheric drift measurements by closely spaced receiver method (D1). Transmitter and 3 receivers. Calculation of drift speed and direction by full correlation analysis. Observing schedule 4 x hourly if E-layer echoes are present. Only E-layer measurements are made.
RAW DATA	Strip chart showing correlation functions
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1Ø MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	IONOSPHERIC DRIFT MEASUREMENTS at De Bilt (3-monthly bulletin of Royal Netherlands Meteorological Institute)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Director, Division of Geophysics Royal Netherlands Meteorological Ins Utrechtse Weg De Bilt Netherlands
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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IRKUTSK
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ITEM: 862
DATE:00/00/75

DISCIPLINE	B10 Ionospheric Drifts
STATION LATITUDE	N 52.47
STATION LONGITUDE	E 104.03
ALTERNATE NAMES	Zui
DATES OF OPERATION	04/1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionospheric Drift Measurements
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter, bulletins
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. N. M. Erofeev SibIZMIR P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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B10 Ionos

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KUHLUNGSBORN
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ITEM: 981
DATE:11/08/75 2 a

DISCIPLINE ---------- B1Ø Ionospheric Drifts
STATION LATITUDE ---------- N 54.12
STATION LONGITUDE ---------- E 11.77
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1956 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- D1 drift measurements, continuous records, radio sets on various frequencies in the HF, MF, LF and VLF range, 33 MHz radar equipment

RAW DATA ---------- Paper records, some film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ Ø.5 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- GEOPHYSIKALISCHE BEOBACHTUNGS-ERGEBNISSE (Geophysical Data) monthly bulletin

DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Tokyo

DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. Dr. K. Sprenger
Observatorium fur Ionospharenforschun
Mitschurin Str. 4-6
Kuhlungsborn
German Dem Rep DDR 2565

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- The monthly bulletin Geophysical Data is available from Akad. d. Wissenschaften der DDR, Zentralinstitut fur solar-terrestrische Physik (HHI), DDR 1199 Berlin-Adlershof.

211

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LEICESTER
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ITEM: 340
DATE:18/07/75

DISCIPLINE	B1Ø Ionospheric Drifts
STATION LATITUDE	N 52.00
STATION LONGITUDE	E 359.00
ALTERNATE NAMES	
DATES OF OPERATION	Ø8/1966 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Four station Doppler network. The system consists of an H. F. Doppler system (see Jones J. E., 1969, "ESSA TECHNICAL REPORT ERL 142-SDL 11.) with 4 Tx sites and a central receiver. Each Tx site uses two frequencies for day/night monitoring. Occasionally Rx data is available from other sites as well as the central one.
RAW DATA	Analog + digital tapes, photographic film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Photographic film, computer printout
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. T. B. Jones Physics Department, Leicester Uni University Road Leicester England LEI 7RH
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data is recorded continuously, except for equipment malfunction. Co-investigator Dr. C. T. Spracklen.

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B11 Ionospheric Sc

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ARCETRI
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ITEM: 1082
DATE:23/08/76

DISCIPLINE ---------- B11 Ionospheric Scintillations from Satellite Beacons
STATION LATITUDE ---------- N 43.75
STATION LONGITUDE ---------- E 11.25
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Satellite Beacon Observations, telemetry station for the SOLRAD satellites.
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Giuseppe Tagliaferri
Osservatorio Astrofisico di Arcetri
Largo E. Fermi, 5
Firenze
Italy 50125

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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ITEM: 916

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Scintillations from Satellite

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HAIFA
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ITEM: 941
DATE: 13/03/75 / C

DISCIPLINE ---------- B11 Ionospheric Scintillations from Satellite Beacons
STATION LATITUDE ---------- N 32.87
STATION LONGITUDE ---------- E 35.09
ALTERNATE NAMES ---------- Haifa Radio Observatory
Natl Comm Space Research
Radio Observatory NCSR

DATES OF OPERATION ---------- 11/1964 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ R390 Receivers and others, Faraday fading record on 6 channel recorder at 20, 40, 41 MHz; stationary satellite scintillations using rigor antenna studies of polarization of satellite signals; 400 MHz Doppler measurement.

RAW DATA ---------- Strip chart, computer printouts
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tables, graphs, computer printout
DATA ROUTINELY PUBLISHED ---------- ANNUAL REPORTS OF THE RADIO OBS. (by AF contract)

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. J. Mass
Radio Observatory, NCSR
POB 4655
Haifa
Israel

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data available after 12 months.
Participation in the Joint Satellite Study Group (JSSG).

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BELSK

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ITEM: 916

DATE: 03/06/75 1b

DISCIPLINE	B11 Ionospheric Scintillations from Satellite Beacons
STATION LATITUDE	N 51.84
STATION LONGITUDE	E 20.79
ALTERNATE NAMES	
DATES OF OPERATION	11/1974 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Commercial receivers with converters and antennas working on 40 and 41 MHz; INTASAT satellite beacon signals are received and recorded. Strip chart recorders speed 6 cm/m, occasionally higher. Every satellite pass with zenith distance greater than 70 degrees is recorded, except on weekends and holidays.
RAW DATA	Strip charts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Plots, tables of TEC, AFGL scintillation index
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. W. Wernik Inst. of Geophysics, Polish Acad. of S ul. Pasteura 3, P.O. Box 155 Warsaw Poland 00-973
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Reduced data are available for each half-min period.

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B11 Ionospheric Scinti

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HONG KONG
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ITEM: 952
DATE:07/04/75 12

DISCIPLINE ---------- B11 Ionospheric Scintillations from Satellite Beacons
STATION LATITUDE ---------- N 22.28
STATION LONGITUDE ---------- E 114.13
ALTERNATE NAMES ---------- Physics Dept, Hong Kong Univ

DATES OF OPERATION ---------- 09/1963 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Faraday Rotation Recording Equipment, geostationary satellite signals recorded 1) quarter wavelength dipole (frequency convertor) RACAL radio receiver (SEFRAM pen recorder) crystal clock; 2) Titheridge rotation Yagi (Phase Comparator) Rustrak recorder (frequency convertor) RACAL radio for transit and geostationary satellites.

RAW DATA ---------- Chart recordings
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 6 MONTHS
FORM OF REDUCED DATA ---------- Latitude profiles, content values at N23.3

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- G. O. Walker
Physics Department
Hong Kong University
Hong Kong

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ----- Content data at N23.3 available from 1968 backwards. No results 1969-1974. INTASAT used since 11/1974. INTASAT satellite recordings are also being taken at Stasion Meteo, Ngurah Rai Airport, Bali, Indonesia S8.75 E115.16.

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SAGAMORE HILL
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ITEM: 1158
DATE:18/03/75 2

DISCIPLINE ----------	B11 Ionospheric Scintillations From Satellite Beacons
STATION LATITUDE ----------	N 42.63
STATION LONGITUDE ----------	E 289.18
ALTERNATE NAMES ----------	AFGL Sagamore Hill Radio Obs
DATES OF OPERATION ----------	03/1972 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Total Electron Content Polarimeter (own design), 24h monitoring, equipment consists of 2 Yagi antennas, a R390 receiver, polarimeter, and chart recorder run at 1.0mm/min. Scintillation data are taken from the amplitude channel. The 136.470 MHz beacon from ATS-3 is monitored.
RAW DATA ----------	Analog charts
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Punched cards
DATA ROUTINELY PUBLISHED ----------	AFCRL GEOPHYSICS AND SPACE DATA BULLETIN (Quarterly)
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Jack Klobuchar AFGL Hanscom Air Force Base Bedford MA USA 01731
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Part of USAF AWS SESS.

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TAIPEI
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ITEM: 1053
DATE:24/02/75 2 C

DISCIPLINE ----------	B11 Ionospheric Scintillations from Satellite Beacons
STATION LATITUDE ----------	N 25.20
STATION LONGITUDE ----------	E 121.50
ALTERNATE NAMES ----------	Taipei

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RAROTONGA
****

ITEM: 810
DATE: 00/00/75 2a

DISCIPLINE ---------- B11 Ionospheric Scintillations from Satellite Beacons
STATION LATITUDE ---------- S 21.20
STATION LONGITUDE ---------- E 200.20
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Satellite Beacon Observations
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. John E. Titheridge
Radio Research Centre, U of Auckland
Private Bag
Auckland
New Zealand

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Part of USAF AWS SESS.

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TAIPEI
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ITEM: 1053
DATE: 24/02/75

DISCIPLINE ---------- B11 Ionospheric Scintillations from Satellite Beacons
STATION LATITUDE ---------- N 25.20
STATION LONGITUDE ---------- E 121.50
ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 10/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Satellite Beacon Receivers, 10-element rotating Yagi antenna, VHF convertor, HF communication receiver, dual channel recorder, regulated power supply, 24h observations, chart speed 15mm/min

RAW DATA ---------- Dual channel recording chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Graphical plots, tables, computer printouts

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Radio Wave Research Laboratory
Dept of Electrical Engineering
National Taiwan University
Taipei Taiwan
China

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Member of the Joint Satellite Studies Group; sponsored by AFGL in Bedford, MA USA.

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B11 Ionospheric Scin

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WELLINGTON
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ITEM: 809
DATE:00/00/75

DISCIPLINE ----------	B11 Ionospheric Scintillations from Satellite Beacons
STATION LATITUDE ----------	S 41.23
STATION LONGITUDE ----------	E 174.92
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Satellite Beacon Observations
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. John E. Titheridge Radio Research Centre, U of Auckland Private Bag Auckland New Zealand
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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spheric Scintillations from Satellite (Cont.)

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00/00/75 2 2

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e, U of Auckland

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B12 Ionospheric

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COLLEGE
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ITEM: 204
DATE:09/03/76 1a

DISCIPLINE ----------	B12 Ionospheric Back- and Forward-Scatter
STATION LATITUDE ----------	N 64.86
STATION LONGITUDE ----------	E 212.15
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Backscatter radar, VHF (50MHz) radar at Anchorage overlooking Fairbanks/Ft. Yukon region. Range-Time-Intensity (RTI) film strips of VHF scattering from auroral zone irregularities for particular periods.
RAW DATA ----------	Film (RTI)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Ben B. Balsley Aeronomy Lab, NOAA Boulder CO USA 80302
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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B12 Ionospheric Back-and Forward-Scatter

ITEM: 204
DATE:09/03/76 1a

1 Forward-Scatter

50MHz) radar at Anchorage
. Yukon region. Range-
n strips of VHF scatter-
regularities for parti-

MONTHS

lsley
Lab, NOAA
CO
80302

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LINDAU
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DISCIPLINE	B12 Ionospheric Back-a
STATION LATITUDE	N 51.65
STATION LONGITUDE	E 10.13
ALTERNATE NAMES	
DATES OF OPERATION	01/1969 to present 07/73-01/75 no operati
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Backscatter radar ionc 45 MHz, continuous swe duration of frequency ter peak pulse power l microseconds, pulse re receiver band width 3 pointing 21 and 345 de natingly. Pprime(f) r
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6
FORM OF REDUCED DATA	Graphic
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. H. Max Pla Postfac Lindau/ West Ge
ADDRESS FOR INFORMATION ABOUT DATA	Same as
ADDITIONAL COMMENTS	Station did not operate--

ITEM: 176
DATE:09/03/75 1b

Forward-Scatter

50 MHz) Radar located at
r Fairbanks/Ft Yukon re-

ONTHS

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ITEM: 351
DATE:16/01/76 / C

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---- B12 Ionospheric Back-and-Forward-Scatter
---- N 51.65
---- E 10.13

---- 01/1969 to present
07/73-01/75 no operation
---- Regular
---- Backscatter radar ionosonde, frequency range 2.8-45 MHz, continuous sweep, logarithmic scale, duration of frequency sweep is 8 min. Transmitter peak pulse power 100 kW, pulse duration 200 microseconds, pulse repetition rate 50 Hz, receiver band width 3 kHz, rhombic antennas pointing 21 and 345 degrees East of North alternatingly. Pprime(f) records every 30 min.
---------- Film
---------- Regular
ILABLE AFTER ------ 6 MONTHS
---------- Graphical plots

T ---------- Yes
ABOUT STATION ----- Dr. H. G. Moller
Max Planck Inst Aeronomie, Ionospharenphysik
Postfach 20
Lindau/Harz Niedersachsen
West Germany 3411

ABOUT DATA -------- Same as above
- Station did not operate--07/1973 - 01/1975.

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FORT YUKON
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ITEM: 176
DATE:09/03/75

DISCIPLINE ---------- B12 Ionospheric Back- and Forward-Scatter
STATION LATITUDE ---------- N 66.57
STATION LONGITUDE ---------- E 214.75
ALTERNATE NAMES ----------
DATES OF OPERATION ---------
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Backscatter Radar. VHF (50 MHz) Radar located at Anchorage and looking over Fairbanks/Ft Yukon region.

RAW DATA ---------- Film (RTI)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 8 MONTHS
FORM OF REDUCED DATA ---------- Film
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Ben Balsley
Aeronomy Lab - NOAA
Boulder CO
USA 80302

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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B12 Ionospheric Back

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NURM1JARV1
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ITEM: 444
DATE:16/01/76 / 2

DISCIPLINE ----------	B12 Ionospheric Back- and Forward-Scatter
STATION LATITUDE ----------	N 60.51
STATION LONGITUDE ----------	E 24.65
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1975 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Backscatter ionosonde, backscatter radar. Frequency range 2.0-32 MHz, continuous sweep logarithmic frequency scale, duration of frequency sweep 8 min, Transmitter: Peak pulse power 15 kW, Pulse duration 200 microsec, Pulse repetition rate 50 Hz, Receiver band width 3kHz, Rhombic antennas pointing 7 & 45 degrees west of north are used alternatingly, Pprime(f) records every 30 min.
RAW DATA ----------	Film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	6 MONTHS
FORM OF REDUCED DATA ----------	Graphical plots
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. H. G. Moller Max Planck Inst. f. Aeronomie Postfach 20 Lindau/Harz Niedersachsen West Germany 3411
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

ack-and Forward-Scatter (Cont.)

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UPPSALA
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ITEM: 651
DATE:08/07/75

DISCIPLINE	B12 Ionospheric Back- and Forward-Scatter
STATION LATITUDE	N 59.80
STATION LONGITUDE	E 17.60
ALTERNATE NAMES	
DATES OF OPERATION	09/1959 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	HF-backscatter, backscattered signals from ionospheric F-layer, sporadic E and auroral ionization, frequency: 15.6 MHz, appr. peak power: 10kW, pulse repetition rate: 2.5 Hz, pulse length: 200 microsec range: appr. 3000 km, antenna horizontal azimuth scanning 5-element Yagi, two 360 degree rotations per minute. Display: PPI, 16 mm film, one display per minute.
RAW DATA	16 mm film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Mr. Harald Derblom Uppsala Ionospheric Observatory Uppsala 1 Sweden S-755 90
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The instrument has during limited periods been out of operation due to rebuilding, etc.

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YAKUTSK
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ITEM: 677
DATE:13/02/76

DISCIPLINE	B12 Ionospheric Back- and Forward-Scatter
STATION LATITUDE	N 62.00

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YAKUTSK

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ITEM: 677

DATE:13/02/76

DISCIPLINE ---------- B12 Ionospheric Back- and Forward-Scatter

STATION LATITUDE ---------- N 62.00

STATION LONGITUDE ---------- E 129.70

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 02/1976 to present
Intermittent operation

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- Backscatter radar, pulse radar

RAW DATA ---------- 35 mm film, digital tables

DATA REDUCTION PRACTICE ----------

REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS

FORM OF REDUCED DATA ---------- Tables, in special case-microfilm

DATA ROUTINELY PUBLISHED ---------- Description of experiment is in VERKHNYAYA ATMOSFERA VYSOKIKH SHIROT, RESEARCH IN GEOMAGNETISM, AERONOMY AND SOLAR PHYSICS

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ----------

ADDRESS FOR INFORMATION ABOUT STATION ----- V. A. Shaftan
Inst Cosmophysical Research & Aeronom
Lenin Avenue 31
Yakutsk
USSR 677007

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS -----

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B13 Whistlers

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AHMEDABAD
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ITEM: 736
DATE:00/00/75

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- N 23.01
STATION LONGITUDE ---------- E 72.60
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ VLF Receiver
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------

Prof. Ram Gopal Rastogi
Physical Research Laboratory
Navrangpura
Ahmedabad Gujarat
India 380009

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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ers and VLF Emissions

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BEAR ISLAND
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ITEM: 710
DATE:00/00/75

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 74.50
STATION LONGITUDE	E 19.20
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF Receiver
RAW DATA	Strip chart, pen and ink
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Magnetic tape
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Mr. Ove Bratteng Auroral Obs, Univ of Tromso P.O. Box 953 Tromso Norway N-9001
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Copies of data on request, limited by our capacity

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BELEM
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ITEM: 1032
DATE:12/03/75

DISCIPLINE ..... B13 Whistlers and VLF Emissions

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ATIBAIA, ITAPETINGA
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ITEM: 36
DATE:19/01/76

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	S 23.50
STATION LONGITUDE	E 313.50
ALTERNATE NAMES	Itapetinga Sao Paulo
DATES OF OPERATION	1965 to present Station moved in 1970
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF Tracking Receivers (3). VLF long distance propagation.
RAW DATA	Strip chart, tables
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA, Boulder, Colorado USA 80302)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	L. Rizzo Piazza Universidade Mackenzie - CRAAM R. Itambe 135 Sao Paulo Brazil 01239
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station moved from Umuarama to Atibaia in 1970.

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ITEM: 1032
DATE:12/03/75

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- N 1.39
STATION LONGITUDE ---------- E 311.56
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 06/1974 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 Tracor 599R receivers).
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper D
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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B13 Whistlers an

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BELGRANO
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ITEM: 52
DATE:29/03/76

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- S 77.97
STATION LONGITUDE ---------- E 321.20
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 03/1974 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- VLF Receiver 400-12000 Hz; also VLF Goniometer (began operating 5/1976)
RAW DATA ---------- Analog magnetic tape
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 15 MONTHS
FORM OF REDUCED DATA ---------- 35 mm film
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. Yvonne Corcuff
Lab de Physique de la Haute Atm
40, Av. du Recteur Pineau
Poitiers
France 86002

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 15 months.

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ITEM: 1011

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B13 Whistlers and VLF Emissions (Cont.)

ITEM: 52
DATE:29/03/76

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Special
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Corcuff
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after 15 months.

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BOULDER
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DISCIPLINE ----------	B13 Whistlers and VLF Emi
STATION LATITUDE ----------	N 40.00
STATION LONGITUDE ----------	E 254.74
ALTERNATE NAMES ----------	TELCOM Boulder
DATES OF OPERATION ----------	08/1973 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase dif signals at one or more of 10.2, 11.3, 13.6 kHz, dig from strip charts (speed
RAW DATA ----------	Some strip some codin
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2
FORM OF REDUCED DATA ----------	Computer p magnetic t
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding US Coast G 2100 2nd S Washington USA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as ab
ADDITIONAL COMMENTS -----	Some Cesium Standard availab phase. Some signal strength used. Plans are for as many

ITEM: 1011
DATE:12/03/75

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ITEM: 1026
DATE:12/03/75

-------- B13 Whistlers and VLF Emissions
-------- N 40.00
-------- E 254.74
-------- TELCOM Boulder
-------- 08/1973 to present
-------- Regular
ON ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h).
---------- Some strip charts (continuous), some coding forms (hourly data)
ICE ---------- Regular
AVAILABLE AFTER ------ 2 MONTHS
---------- Computer printout data blocks, magnetic tape data blocks
SHED ----------

UEST ---------- Yes
ION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper Det
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ION ABOUT DATA -------- Same as above
----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

40, Av. du Recteur Pineau
Poitiers
France 86002

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 15 months.

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BERMUDA
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ITEM: 1011
DATE:12/03/75

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- N 32.26
STATION LONGITUDE ---------- E 295.12
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 10/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2kHz, 11.3kHz, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (3 Tracor 599R receivers).
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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B13 Whistlers ar

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CAMPBELL ISLAND
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ITEM: 80
DATE:17/03/75

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	S 52.50
STATION LONGITUDE	E 169.20
ALTERNATE NAMES	
DATES OF OPERATION	03/1972 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF recordings 0.3-10 kHz or 1-15 Hz. Vertical triangular loop aligned Invariant north/south. Preamplifier, 1/4 inch 4 track 2 channel tape recorder at 3 3/4 ips. Recordings coincide with recordings at Dunedin and (normally) with VLF recording form the ISIS satellites take at Lauder, N. Z.
RAW DATA	Analog magnetic tape
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	35 mm film of Dynamic Spectra
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. R. L. Dowden Physics Dept., Univ. of Otago Box 56 Dunedin New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Coordinated with stations at Dunedin and (in the future) at Hobart. NASA - 36 time code will be added in 10/1975. Special purpose data usually available after 12-24 months.

B13

nd VLF Emissions (Cont.)

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DAVIS
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ITEM: 137
DATE:06/06/75

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	S 68.58
STATION LONGITUDE ----------	E 77.96
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	03/1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	VLF Spectrum Analyser, analyser sweeps (analyses) frequencies 0-10 kHz every 5 seconds continuously. 400 Hz, 1 kHz and 5 kHz filtered outputs are recorded on Sanei at speeds 1/5 cm/min.
RAW DATA ----------	35 mm recording film continuous approx. 80 ft/14 days (B & W)
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Director Antarctic Div., Dept. of Science 568 St. Kilda Road Melbourne Victoria Australia 3004
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	35 mm film is black and white monochrome.

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CHUBU

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ITEM: 966
DATE:03/03/75

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 35.27
STATION LONGITUDE	E 137.01
ALTERNATE NAMES	Kasugai
DATES OF OPERATION	01/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Whistlers: 1-16 kHz, 50-52 min at every hour.
RAW DATA	Analog magnetic tape
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Dr. Atsushi Kimpara Chubu Institute of Technology 1200 Matsumoto-cho Kasugai-shi Aichi-ken, 487 Japan
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 2 months.

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B13 Whistlers a

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DUNEDIN
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ITEM: 154
DATE:17/03/75

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	S 45.79
STATION LONGITUDE ----------	E 170.48
ALTERNATE NAMES ----------	Swampy Summit
DATES OF OPERATION ----------	1966 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	VLF recordings, various bandwidths, mainly 0.3-10 kHz, 1-15 kHz, 1-30 kHz, vertical triangular loops, low noise preamplifiers, 1/2 inch 7 channel, 1/4 inch 4 track 2 channel tape recorders. Observing schedule since 1972 has been linked to VLF recording in the ISIS satellites taken at Lauder, N.Z. Other recordings have been made during special activity periods.
RAW DATA ----------	Analog magnetic tape
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	35mm film of dynamic spectra
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. R. L. Dowden Physics Dept, Univ. of Otago Box 56 Dunedin New Zealand
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Recordings are also made at Campbell Island and are planned for Hobart, Tasmania. In 1973 (Aug & Sept) Dunedin and Campbell Is. participated in a conjugate VLF transmission experiment with the Aerospace Corporation. NASA-36 time code since 1972.

nd VLF Emissions (Cont.)

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HALLEY BAY
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ITEM: 229
DATE:14/07/75

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- S 75.52
STATION LONGITUDE ---------- E 333.30
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 05/1967 to present
Station moved
Intermittent operation
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ----- VLF Goniometer, broad band VLF radio receiver bandwidth 0.3-20 kHz. Simulated rotation of loop antenna enables direction of arrival of signals to be determined. Twin-track recordings made on magnetic tape at a speed of 19 cm/s (7.5 ips). VLF signals on first track, timing and calibration information on second track. Routine schedule of observations has been done in the past but now observations are made when VLF activity is high or for special collaborative programs.

RAW DATA ---------- Analog magnetic tape
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Film, paper spectrograms, tables, graphical plots
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- The Director
British Antarctic Survey
2 All Saints Passage
Cambridge
England CB2 3LS

ADDRESS FOR INFORMATION ABOUT DATA -------- Dr. K. Bullough
University of Sheffield
Department of Physics
Sheffield
England S3 7RH

ADDITIONAL COMMENTS ----- No data available for 1968. Station is continually moving slowly westward at a rate of about 400 m/yr. In 1967 station was rebuilt about 3 km east of its previous location. Special purpose data usually available after 18 months (long delay in receiving records from Antarctica).

B13 Whistlers ar

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HALLEY BAY
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ITEM: 230
DATE:20/06/75 4 a

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	S 75.52
STATION LONGITUDE	E 333.37
ALTERNATE NAMES	
DATES OF OPERATION	05/1967 to present Intermittent operation
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	VLF Goniometer, direction of arrival of VLF whistlers and emissions, equipment consists of 1/4 inch analog tape recorder, preamplifiers and timing circuits. Antenna is rotating goniometer directional type (see Planetary & Space Sci., Vol 21(1973) pp 913-923, paper by Segrado and Bullough). Bandwidth 0.5-20 kHz, operation timed to coincide with special observational periods and events.
RAW DATA	Analog magnetic tape
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. K. Bullough Dept of Physics, The Hicks Building The University Sheffield England S3 7RH
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Few observations in 1967, none in 1968. Equipment also records signal strengths of selected transmissions (paper strip chart) from 1971. Proposed similar equipment unmanned at about 150 km. Part of proposed Argentine, France, UK, USA network for position. Part of L=4 network, proposed conjugate point network. Special purpose data usually available after 6-18 months.

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HALLEY BAY
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ITEM: 231
DATE: 20/06/75 4 h

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- S 75.52
STATION LONGITUDE ---------- E 333.37
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 06/1971 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Synoptic wide-band VLF recordings for whistler studies, equipment consists fo 1/4 inch tape recorder (normally run at 7.5 IPS), preamplifiers and timing equipment connected to a vertical loop antenna of 60 foot sides. Recordings normally made for 1 min at 5,20,35,50 min past hour.

RAW DATA ---------- Analog magnetic tape
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Film
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION -----
Dr. J. R. Dudeney
British Antarctic Survey, Appleton Lab
Ditton Park
Slough Bucks
England SL3 9JX

ADDRESS FOR INFORMATION ABOUT DATA --------
Prof. M. G. Morgan
Dartmouth College
Radiophysics Laboratory
Hanover NH
USA 03755

ADDITIONAL COMMENTS ----- Part of 75 degrees West VLF network and L=4 network. Special purpose data usually available after 6-18 months.

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B13 Whistlers a

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HERMANUS
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ITEM: 246
DATE:03/02/76 4

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	S 34.42
STATION LONGITUDE ----------	E 19.23
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	03/1973 to present
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION -----	VLF Receiver, continuous graphical record of s-ferics at selected frequencies including 27 kHz.
RAW DATA ----------	Strip charts
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Graphics
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Mr. A. M. Van Wijk Hermanus Magnetic Observatory P.O. Box 32 Hermanus Rep of So Africa 7200
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data are available as photo copies of specific events only.

and VLF Emissions (Cont.)

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HOBART
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ITEM: 251
DATE:17/03/75

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	S 42.50
STATION LONGITUDE ----------	E 147.20
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	05/1975 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	VLF recordings 0.3-10, 15 or 20 kHz, vertical triangular loop aligned invariant north/south. 1/4 inch 2 channel 4 track tape recorder at 3 3/4 or 7 1/2 ips. NASA-36 time code. To coordinate with recordings at Dunedin and Campbell Island.
RAW DATA ----------	Analog magnetic tape
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	35 mm film of dynamic spectra
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. R. L. Dowden Physics Dept, University of Otago Box 56 Dunedin New Zealand
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ITEM: 776

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ITEM: 1014
DATE:12/03/75 4 d

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- N 66.53
STATION LONGITUDE ---------- E 12.85
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 05/1967 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (3 ITT AN/WRN-2 Receivers)
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper
US Coast Guard
3100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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INUBO
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ITEM: 776
DATE:00/00/75

DISCIPLINE ---------- B13 Whistlers and VLF Emission
STATION LATITUDE ---------- N 35.70
STATION LONGITUDE ---------- E 140.85
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ VLF Receiver
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Yukio Hakura
Radio Res Labs, Space Phys Lab
Nukui-Kitamachi 4-2-1
Koganei Tokyo
Japan 184

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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B13 Whistlers a

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KAGOSHIMA
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ITEM: 290
DATE:02/06/75

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 31.48
STATION LONGITUDE	E 130.71
ALTERNATE NAMES	
DATES OF OPERATION	06/1967 to present Station moved Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Whistler Recorder, plasmaspheric electron density and plasmaspheric whistler ducts -- a usual whistler observing apparatus: frequency range 500 to 8 000 Hz, recording on magnetic tape, tape speed 9.5 cm/s, 2 min observations starting at 50 min every hour.
RAW DATA	Analog magnetic tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Kagoshima Observatory Research Inst of Atmospherics, Nagoya Honjo Tarumizu Kagoshima Japan 891-21
ADDRESS FOR INFORMATION ABOUT DATA	Research Institute of Atmospherics Nagoya University 3-13 Honohara Toyokawa Aichi Japan 442
ADDITIONAL COMMENTS	Station at N31.51 E130.76 from 6/1967 to 4/1974 with a gap in operation 5/1970-6/1971. Data sent to WDC-C (Radio Research Laboratories, Koganei, Tokyo) since 9/1975.

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nd VLF Emissions (Cont.)

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KASHIMA
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ITEM: 300
DATE:23/01/76

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- N 35.95
STATION LONGITUDE ---------- E 140.65
ALTERNATE NAMES ----------

DATES OF OPERATION --------- 09/1970 to present
Intermittent operation
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- VLF Receiver, telemetry of ISIS and Alouette VLF data, ISIS VLF Receiver on satellite 50 Hz - 30 kHz wide band VLF electric field, 2 passes/ week. 1) VLF spectrum film (0-10 kHz, film speed 20 cm/min), 2) Narrow band 6 frequency intensity vs time (or latitude data). See RADIO AND SPACE DATA, Part 3, VLF Emissions, 1975, from RRL, Japan.

RAW DATA ---------- Film, strip chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 10 MONTHS
FORM OF REDUCED DATA ---------- Film, strip chart
DATA ROUTINELY PUBLISHED ---------- RADIO AND SPACE DATA, Radio Research Labs, Tokyo 184

U DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Tadanori Ondoh
Radio Research Laboratories
Koganei-shi
Tokyo
Japan 184

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- We are members of ISIS Working Group Meeting. Data available on spectrum film (0-10 kHz range), and strip charts of 6 frequencies (300 Hz, 1.5 kHz, 5 kHz, 8 kHz, 16 kHz, 25 kHz) intensity vs time (or latitude), published since 1975.

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B13 Whistlers an

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KERGUELEN
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ITEM: 304
DATE:27/01/76 6a

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	S 49.44
STATION LONGITUDE	E 70.42
ALTERNATE NAMES	Port aux Francais
DATES OF OPERATION	03/1964 to present 1959-1964 intermittent obs. 01/1975 station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Broadband VLF receiver, ELF-VLF (one component 30 Hz to 12 kHz), integrated noise recorder in 6 channels centered on 8, 4, 2, 1.2 and 0.76 kHz and in the ELF band (30-300 Hz). Recording during one minute every hour (and one minute every 5 minutes during special campaigns).
RAW DATA	Strip chart for integrated noise, analog magnetic tape
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Film (Rayspan), tables of whistlers and VLF emission occurrence
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Monsieur le Dir. des Lab. Scientifiques T.A.A.F. 27 rue Oudinot Paris France 75700
ADDRESS FOR INFORMATION ABOUT DATA	Mademoiselle Y. Corcuff Lab. de Physique de la Haute Atmosphere 40 Av. du Recteur Pineau Poitiers France 86022

ADDITIONAL COMMENTS ----- Intermittent records have been made from 1/1959 to 3/1964. Since 1964, observations are regular. Magnetic tape recording of the waveform during special campaigns usually available after 12 months. Since 1976, whistler direction finding during special campaigns. VLF Goniometer began operations 5/1976. Simultaneous and similar measurements are carried out at General Belgrano (Antarctica). Station moved in January 1975 (former location S49.35 E70.20).

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KIRUNA
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ITEM: 314
DATE:20/01/76

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- N 67.83
STATION LONGITUDE ---------- E 20.42
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- VLF Receiver, 3 Tracor receivers, Cesium reference oscillator, continuous recording of usually 3 signals across the polar cap. Chart speed 2 inch/h, phase and amplitude of all signals on the same chart. Chart width 10 inches, scale 40 dB and 100 microseconds respectively.

RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ---------- Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Svante Westerlund
Kiruna Geophysical Institute
Kiruna 1
Sweden S-981 01

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Participate in INT-VLF network. Reference Dr. F. H. Reder, Fort Monmouth, NJ USA. Raw data on strip charts not normally reduced, but on special occasion computer printouts are available of phase and amplitude hourly values.

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B13 Whistlers a

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LA MOURE
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ITEM: 1023
DATE:12/03/75 bc

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	N 46.56
STATION LONGITUDE ----------	E 261.36
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1972 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h).
RAW DATA ----------	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding Officer OMEGA Nav Sys Oper US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

and VLF Emissions (Cont.)

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ITEM: 338
DATE:13/01/76 6

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 52.00
STATION LONGITUDE	E 359.00
ALTERNATE NAMES	
DATES OF OPERATION	09/1975 to present 1967-1971
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF Receivers (TRACOR 5995), Varian Rubidium frequency standard. Operation continuous, frequencies monitored - 16 KHz GBR, 19.6 kHz GBZ and some long path Omega transmissions. Recordings on 10 inch chart recorders--digitiza tion of output in progress. Phase and amplitud of VLF signals. Loop antennas receive normal a abnormal skywave components separately. Vertic whip antenna receives groundwave, compares phas difference with skywave.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Special , None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. T. B. Jones Univ of Leicester, Physics Dept University Road Leicester England LEI 7RH
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Similar recordings at other location in the UK planned. Special purpose reduction of data is usually available after 1 month.

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B13 Whistlers an

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ITEM: 1020
DATE:12/03/75 7a

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	N 21.31
STATION LONGITUDE ----------	E 202.35
ALTERNATE NAMES ----------	Honolulu
DATES OF OPERATION ----------	03/1972 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (4 ITT AN/URN-18 (XN-1) receivers).
RAW DATA ----------	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding Officer OMEGA Nav Sys Oper De US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

and VLF Emissions (Cont.)

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MOSHIRI
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ITEM: 409
DATE: 02/06/75

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- N 44.36
STATION LONGITUDE ---------- E 142.27
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1957 to present
Station moved
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Whistler recorder, Plasmaspheric Electron Density and Plasmaspheric Whistler Ducts. A usual whistler observing apparatus: frequency range 500-8000 Hz, recording on magnetic tape, tape speed 9.5cm/s, 2-min observation starting at 50 min every h.

RAW DATA ---------- Analog magnetic tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------- 3 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- Whistler Report: table of hourly values of whistler occurrence rate and dispersion of each day, consisted of 5 or 6 sheets per month.

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Radio Res Lab, Koganei, Tokyo

DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Moshiri Observatory
Research Inst of Atmos
Nagoya Univ, Moshiri
Horokanai Hokkaido
Japan 074-07

ADDRESS FOR INFORMATION ABOUT DATA ---------- Research Inst of Atmos, Nagoya Uni
3-13 Honohara
Toyokawa Aichi
Japan 442

ADDITIONAL COMMENTS ------ 07/1957-11/1962 station operated at Wakkanai N45.4 E141.7. Since 11/1962 continuing at Moshiri.

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B13 Whistlers an

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MOSHIRI
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ITEM: 410
DATE:02/06/75 7c

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 44.36
STATION LONGITUDE	E 142.27
ALTERNATE NAMES	
DATES OF OPERATION	01/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Hiss Recorder. Behavior of magnetospheric particles associated with VLF Emissions. A usual hiss intensity observing apparatus; four point frequencies 0.5, 1.5, 5.0, 8.0 kHz, measurements of time rate at a given percentage, average level and minimum level, loop antenna, strip chart speed 6cm/h, digital paper tape sampled once per 4 minutes.
RAW DATA	Strip chart, digital paper tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	Whistlers and VLF Emissions· table of hourly values of whistler occurrence rate of each day and type of VLF Emissions, one sheet per month.
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Radio Res Lab, Koganei, Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Moshiri Observatory Research Inst of Atmos Nagoya Univ, Moshiri Horokanai Hokkaido Japan 074-07
ADDRESS FOR INFORMATION ABOUT DATA	Research Inst of Atmospherics Nagoya Univ 3-13 Honohara Toyokawa Aichi Japan 442
ADDITIONAL COMMENTS	

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B13 Whistlers and VLF Emissions (Cont.)

ITEM: 410
DATE:02/06/75 1c

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vior of magnetospheric par-
:h VLF Emissions. A usual
ving apparatus; four point
, 5.0, 8.0 kHz, measure-
: a given percentage, aver-
n level, loop antenna, strip
igital paper tape sampled

chart, digital paper

ar
MONTHS

ers and VLF Emissions· table
rly values of whistler oc-
ce rate of each day and type
? Emissions, one sheet per

Res Lab, Koganei, Tokyo

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ch Inst of Atmos
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nai Hokkaido
074-07

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wa Aichi
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NORFOLK
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DISCIPLINE	B13 Whistlers and V
STATION LATITUDE	N 36.82
STATION LONGITUDE	E 285.71
ALTERNATE NAMES	
DATES OF OPERATION	01/1971 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	OMEGA Receiver, pha signals at one or m 10.2, 11.3, 13.6 kH from strip charts ((1 Tracor 599R rece
RAW DATA	Some some
DATA REDUCTION PRACTICE	Regu
REGULAR REDUCED DATA AVAILABLE AFTER	2
FORM OF REDUCED DATA	Comp magn
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Comm US C 210 Wash USA
ADDRESS FOR INFORMATION ABOUT DATA	Same
ADDITIONAL COMMENTS	Some Cesium Standard a phase. Some signal st used. Plans are for a

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ITEM: 1035
DATE:12/03/75

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---- B13 Whistlers and VLF Emissions
---- N 36.82
---- E 285.71

---- 01/1971 to present
---- Regular
---- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (1 Tracor 599R receiver).
---------- Some strip charts (continuous), some coding forms (hourly data)
---------- Regular
ILABLE AFTER ------ 2 MONTHS
---------- Computer printout data blocks, magnetic tape data blocks
) ----------

T ---------- Yes
ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper Det
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ABOUT DATA -------- Same as above
-- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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B13 Whistlers a

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PIARCO
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ITEM: 1041
DATE:12/03/75

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	N 10.60
STATION LONGITUDE ----------	E 298.65
ALTERNATE NAMES ----------	Trinidad
DATES OF OPERATION ----------	01/1972 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 ITT AN/URN-18 (XN-1) receivers)
RAW DATA ----------	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding Officer OMEGA Nav Sys Oper US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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ITEM: 465
DATE:29/03/76

and VLF Emissions (Cont.)

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POKER FLAT
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ITEM: 467
DATE:05/06/75

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 65.13
STATION LONGITUDE	E 212.55
ALTERNATE NAMES	
DATES OF OPERATION	09/1973 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF Receiver, 500-20 000 Hertz, discrete frequencies. Antenna is single-loop delta record taken for 1 minute every 15 minutes on direct recording tape at 3 3/4 IPS.
RAW DATA	Analog magnetic tape
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Mr. Richard Heacock Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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RIO DE JANEIRO
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ITEM: 1029
DATE:12/03/75

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POITIERS

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ITEM: 465

DATE 29/03/76

DISCIPLINE ---------- B13 Whistlers and VLF Emissions

STATION LATITUDE ---------- N 46.60

STATION LONGITUDE ---------- E .30

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 10/1955 to present

OBSERVING SCHEDULE ----------

INSTRUMENT DESCRIPTION ----- VLF Receiver, VLF Goniometer since 1/1977.

RAW DATA ----------

DATA REDUCTION PRACTICE ---------- Regular

REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS

FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ---------- Yes

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. Yvonne Corcuff
Univ. de Poitiers, Lab de Physique
40, Av. du Recteur Pineau
Poitiers
France 86022

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above

ADDITIONAL COMMENTS -----

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ADDITIONAL COMMENTS -----

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RIO DE JANEIRO

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ITEM: 1029
DATE:12/03/75

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- S 22.87
STATION LONGITUDE ---------- E 316.87
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1973 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 Tracor 599R receivers).
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper Det
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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B13 Whistlers an

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ROBURENT
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ITEM: 749
DATE:00/00/75

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 44.30
STATION LONGITUDE	E 7.88
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	ELF, VLF and higher frequency observations, 1-15 kHz
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Monthly and annual bulletins, microfilm
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Mario Bossolasco Ist. Geofisico e Geodetico, Genoa Univ. P.O. Box 3145 Genoa Italy I-16100
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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SAKUSHIMA
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ITEM: 526
DATE:05/06/75

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 34.73
STATION LONGITUDE	E 137.05
ALTERNATE NAMES	
DATES OF OPERATION	07/1957 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Whistler recorder, Plasmaspheric Electron Density and Plasmaspheric Whistler Ducts. A usual whistler observing apparatus; frequency range 500-8000 Hz, recording on magnetic tape, tape speed 9.5 cm/s, 2-minute observation starting at 50 minutes every hour.
RAW DATA	Analog magnetic tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	Whistler Report; table of hourly values of whistler occurrence rate and dispersion of each day, consisting of 5 or 6 sheets per month available
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Radio Res Lab, Koganei, Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Sakushima Observatory Res Inst of Atmospherics, Nagoya U Sakushima Isshiki Aichi Japan 444-04
ADDRESS FOR INFORMATION ABOUT DATA	Res Institute of Atmospherics Nagoya University 3-13 Honohara Toyokawa Aichi Japan 442
ADDITIONAL COMMENTS	07/1957 - 05/1966 station operated at Toyokawa, N34.83, E137.37, gap period 06/1966 - 01/1967, since 02/1967 continuing at Sakushima.

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B13 Whistlers a

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SANAE
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ITEM: 529
DATE:18/03/75

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DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- S 70.31
STATION LONGITUDE ---------- E 357.64
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Broad Band Whistler Receiver - Whistlers and hiss. 15 m Loop Antennae, Magnetic tape 3 3/4 ips, continuous recordings at selected intervals.

RAW DATA ---------- Magnetic tape, 16mm film
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Film, sonagrams, computer plots of electron density

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. A. D. M. Walker
Physics Dept, University of Natal
King George V Avenue
Durban
South Africa 4001

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Goniometer from 1976, satellite telemetry 1976. Special purpose data usually available after 18 months. Co-investigators: Dr. M. Scourfield, Mr. M. Barker, Dr. A. Hughes, same address as above.

B13 Whistlers and VLF Emissions (Cont.)

ITEM: 529
DATE:18/03/75 9c

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- Whistlers and
agnetic tape
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, 16mm film

THS
ms, computer plots
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. Walker
University of Natal
Avenue

4001

telemetry 1976.
ilable after 18
M. Scourfield,
me address as above.

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SARDINIA
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DISCIPLINE	B13 Whistlers and VLF Emis
STATION LATITUDE	N 39.18
STATION LONGITUDE	E 9.16
ALTERNATE NAMES	
DATES OF OPERATION	02/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	OMEGA Receiver, phase diff signals at one or more of 10.2, 11.3, 13.6 kHz, digi from strip charts (speed 1 (2 Tracor 599R receivers).
RAW DATA	Some strip some coding
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 M
FORM OF REDUCED DATA	Computer pr magnetic ta
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Commanding US Coast Gu 2100 2nd St Washington USA
ADDRESS FOR INFORMATION ABOUT DATA	Same as abo
ADDITIONAL COMMENTS	Some Cesium Standard availabl phase. Some signal strength used. Plans are for as many

ITEM: 759
DATE:00/00/75 9d

ons

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SOGRA
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DISCIPLINE	B13 Whistlers and VLF Emis
STATION LATITUDE	N 62.80
STATION LONGITUDE	E 46.25
ALTERNATE NAMES	
DATES OF OPERATION	

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******* ITEM: 1017
DATE:12/03/75 10 a 3
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------ B13 Whistlers and VLF Emissions
------ N 39.18
------ E 9.16

------ 02/1969 to present
------ Regular
----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 Tracor 599R receivers).
---------- Some strip charts (continuous), some coding forms (hourly data)
Z ---------- Regular
VAILABLE AFTER ------ 2 MONTHS
---------- Computer printout data blocks, magnetic tape data blocks
ED ----------

EST ---------- Yes
N ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper Det
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

N ABOUT DATA -------- Same as above
--- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

******** ITEM: 791
DATE:00/00/75 10 b
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------- B13 Whistlers and VLF Emissions
------- N 62.80
------- E 46.25

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SAO PAULO

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ITEM: 759

DATE:00/00/75

9d

DISCIPLINE ---------- B13 Whistlers and VLF Emissions
STATION LATITUDE ---------- S 23.50
STATION LONGITUDE ---------- E 313.50
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- VLF Receiver
RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter, strip charts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Centro de Radio Astronomia e Astrofisic
C.P. 8792
Sao Paulo
Brazil 01222

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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used. Plans are for as many as 60 monitor stations.

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SOGRA

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ITEM: 791

DATE: 00/00/75

DISCIPLINE ---------- B13 Whistlers and VLF Emissions

STATION LATITUDE ---------- N 62.80

STATION LONGITUDE ---------- E 46.25

ALTERNATE NAMES ----------

DATES OF OPERATION ----------

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ------ ELF, VLF and higher frequency observations, 10-1000 Hz, 0.5-12 kHz, 10-500 kHz

RAW DATA ----------

DATA REDUCTION PRACTICE ----------

REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS

FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ----------

ADDRESS FOR INFORMATION ABOUT STATION ------

Dr. Jacques Vigneron
Groupe de Recherches Ionospheriques
Centre National dEtudes des Telecom.
Saint Maur
France 94100

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above

ADDITIONAL COMMENTS ------

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B13 Whistlers ar

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SUGADAIRA
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ITEM: 580
DATE:22/01/76

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 36.51
STATION LONGITUDE	E 138.35
ALTERNATE NAMES	
DATES OF OPERATION	02/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Whistler detector. Wideband VLF Receiver (delta antenna of 30 X 20 m sq, preamplifier of Volt Gain 51dB, 72dB, low pass filter with cutoff frequency 14 kHz, Teacs 3 channel magnetic tape recorder). Observing schedule (two 80 s recordings at 20 min. and 50 min. past the hour controlled by automatic switching system). Magnetic tape is exchanged every 3 days.
RAW DATA	Sonagram
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED	Whistler Data at Sugadaira Space Radio Wave Observatory, Vol. 1 (1970) to Vol. 5 (1974) are available, tables, graphical plots.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Kokubunji, Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Takashi Okuzawa Univ. Electro-Communications Chofuguoka 1-5-1 Chofu-shi, Toky Japan 182
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

B13 Whistlers and VLF Emissions (Cont.)

ITEM: 580
DATE:22/01/76

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VLF Receiver
sq, preamplifier of
ss filter with cutoff
annel magnetic tape
le (two 80 s record-
past the hour con-
ng system).
very 3 days.

THS
ical plots, computer

at Sugadaira Space
servatory, Vol. 1
. 5 (1974) are avail-
graphical plots.

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kuzawa
-Communications
5-1
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182

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SYOWA
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DISCIPLINE ----------	B13 Whistlers and VLF Emiss
STATION LATITUDE ----------	S 69.00
STATION LONGITUDE ----------	E 39.58
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	03/1973 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	0811 Phase-Tracking VLF rec No. 2). VLF Receiver, Phas The instrument uses a phase er and observes a phase-hel kHz NDT signals continuousl 2.5 cm/h.
RAW DATA ----------	Strip chart work headqua
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MO
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	The National Kaga 1-9-10, Tokyo Japan
ADDRESS FOR INFORMATION ABOUT DATA --------	The Research Nagoya Unive Honohara 3-1 Toyokawa Japan
ADDITIONAL COMMENTS -----	Special purpose data usually a months.

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ITEM: 587
DATE:26/01/76 102

B13 Whistlers and VLF Emissions
S 69.00
E 39.58

03/1973 to present
Regular
0811 Phase-Tracking VLF receiver (IMS Dictionary No. 2). VLF Receiver, Phase-Height measurement. The instrument uses a phase-tracking VLF receiver and observes a phase-height variation for 17.4 kHz NDT signals continuously. The chart speed is 2.5 cm/h.

---------- Strip chart (deposited in network headquarters)
---------- Special
AFTER ------ MONTHS
---------- Tables

---------- Yes

STATION ----- The National Institute of Polar Research
Kaga 1-9-10, Itabashi-ku
Tokyo
Japan 173

DATA -------- The Research Institute of Atmospherics
Nagoya University
Honohara 3-13
Toyokawa Aichi
Japan 442

ecial purpose data usually available after 2
nths.

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B13 Whistlers an

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TANANARIVE
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ITEM: 1038
DATE:12/03/75

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	S 18.92
STATION LONGITUDE ----------	E 47.55
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (3 Tracor 599R receivers).
RAW DATA ----------	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding Officer OMEGA Nav Sys Oper De US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

nd VLF Emissions (Cont.)

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TIHANY
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ITEM: 610
DATE:28/03/75

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 46.90
STATION LONGITUDE	E 17.89
ALTERNATE NAMES	
DATES OF OPERATION	09/1954 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF emission and whistler recorder, whistler recordings on the 50-52 minute of every hour, tape speed 19 cm/s.
RAW DATA	Analog magnetic tape, tables
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6-12 MONTHS
FORM OF REDUCED DATA	Table, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED	Publication of the Hungarian Geophysical Institute Roland Eotvos: Annual Report Tihany Geophysical Observatory
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Mr. Laszlo Hegymegi Hungarian Geophysical Institute Columbus u. 17-23 Budapest Hungary H-1145
ADDRESS FOR INFORMATION ABOUT DATA	Dr. Peter Toth Hungarian Geophysical Institute Kossuth L. u. 81. Tihany Hungary H-8237
ADDITIONAL COMMENTS	

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TORINO
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ITEM: 752
DATE:00/00/75

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 45.05
STATION LONGITUDE	E 7.75
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular

Tihany
Hungary H-8237

ADDITIONAL COMMENTS -----

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TORINO

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ITEM: 752
DATE:00/00/75

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	N 45.05
STATION LONGITUDE ----------	E 7.75
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	VLF Receiver
RAW DATA ----------	Strip charts
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER --------	MONTHS
FORM OF REDUCED DATA ----------	Photographs
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Ing. Giovanni E. Perona Inst di Elettronica, Politecnico Torino Cs. Duca degli Abruzzi 24 Torino Italy
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above

ADDITIONAL COMMENTS ------

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233

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B13 Whistlers a

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TOYOKAWA
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ITEM: 633
DATE:23/01/76 112

DISCIPLINE	B13 Whistlers and VLF Emissions
STATION LATITUDE	N 34.82
STATION LONGITUDE	E 137.39
ALTERNATE NAMES	
DATES OF OPERATION	01/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Phase-tracking VLF receiver (IMS Directory no. 2), phase-height measurement; the instrument uses a phase-tracing VLF receiver and observes a phase-height variation for 11.3 kHz Omega, 18.6 kHz NPG and 22.3 kHz NWC signals continuously. The chart speed employs 2.5 cm/h.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	The Research Institute of Atmospherics Nagoya University Honohara 3-13 Toyokawa Aichi Japan 442
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 2 months.

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TROMSO
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ITEM: 707
DATE:00/00/75 120

nd VLF Emissions (Cont.)

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WELLINGTON
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ITEM: 763
DATE:00/00/75

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	S 41.23
STATION LONGITUDE ----------	E 174.92
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	VLF Receiver, whistler mode signals from NLK and their Doppler shifts (narrow band spectrographic VLF receiver).
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Prints of selected days
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Mr. M. K. Andrews Phys and Eng Lab, Dept Sci and Ind Re Private Bag Lower Hutt New Zealand
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS -------	

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TROMSO

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ITEM: 707

DATE:00/00/75

120

DISCIPLINE ----------	B13 Whistlers and VLF Emissions
STATION LATITUDE ----------	N 69.70
STATION LONGITUDE ----------	E 19.00
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	VLF Receiver
RAW DATA ----------	Strip chart, pen and ink
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	Mr. Ove Bratteng Auroral Obs, Univ of Tromso P.O. Box 953 Tromso Norway N-9001
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	Copies of data on request, limited by our capacity.

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B14 Atmos

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BELEM
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ITEM: 1034
DATE:12/03/75 1a

DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 1.39
STATION LONGITUDE ----------	E 311.56
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	06/1974 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 Tracor 599R receivers).
RAW DATA ----------	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding Officer OMEGA Nav Sys Oper US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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B14 Atmospheric Radio Noise

TEM: 1034
ATE:12/03/75 1a

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20024

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ding instruments
monitor stations.

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BERMUDA
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DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 32.26
STATION LONGITUDE ----------	E 295.12
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differe signals at one or more of the 10,2, 11.3, 13.6kHz, digitize from strip charts (speed 1 in (3 Tracor 599R receivers).
RAW DATA ----------	Some strip cha some coding fo
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONT
FORM OF REDUCED DATA ----------	Computer print magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Command Office US Coast Guard 2100 2nd St., Washington USA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available f phase. Some signal strength rec used. Plans are for as many as

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BOULDER
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DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 40.00
STATION LONGITUDE ----------	E 254.74
ALTERNATE NAMES ----------	TELECOM Boulder

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ITEM: 1013
DATE:12/03/75 1h

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--- B14 Atmospheric Radio Noise
--- N 32.26
--- E 295.12

--- 10/1968 to present
--- Regular
--- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10,2, 11.3, 13.6kHz, digitized hourly readings from strip charts (speed 1 inch/h). (3 Tracor 599R receivers).
---------- Some strip charts (continuous), some coding forms (hourly data)
---------- Regular
LABLE AFTER ------ 2 MONTHS
---------- Computer printout data blocks, magnetic tape data blocks
----

---------- Yes
BOUT STATION ----- Command Officer OMEGA Nav Sys Oper Det
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

BOUT DATA -------- Same as above
Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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ITEM: 1028
DATE:12/03/75 1c

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--- B14 Atmospheric Radio Noise
--- N 40.00
--- E 254.74

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BOULDER

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ITEM: 1028
DATE:12/03/75 / C

DISCIPLINE ---------- B14 Atmospheric Radio Noise
STATION LATITUDE ---------- N 40.00
STATION LONGITUDE ---------- E 254.74
ALTERNATE NAMES ---------- TELECOM Boulder
DATES OF OPERATION ---------- 08/1973 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h).
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper De
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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B14 Atmospheri

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CHUBU
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ITEM: 963
DATE:03/03/75

DISCIPLINE ---------- B14 Atmospheric Radio Noise
STATION LATITUDE ---------- N 35.27
STATION LONGITUDE ---------- E 137.01
ALTERNATE NAMES ---------- Kasugai
DATES OF OPERATION ---------- 01/1967 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Frequency Spectrum 10-30 kHz, continuously
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Tables, paper tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Dr. Atsushi Kimpara
Chubu Institute of Technology
1200 Matsumoto-cho
Kasugai-shi Aichi-ken 487
Japan

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 2 months.

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FRRO

ITEM: 625
DATE:06/06/75

heric Radio Noise (Cont.)

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HERMANUS
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ITEM: 247
DATE:18/04/75

DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	S 34.42
STATION LONGITUDE ----------	E 19.22
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1973 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	SEA Recorder, bank of VLF receivers (16kHz, 21 kHz, 27kHz, 36kHz), chart speed 20mm/h, purpose is to record sudden enhancements of atmospheric (SEAs).
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Magnetic Observatory (CSIR) PO Box 32 Hermanus Rep of So Africa 7200
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data are available on specific events only.

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HESTMONA NORWAY
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ITEM: 1016
DATE:12/03/75

DISCIPLINE ----------	B14 Atmospheric Radio Noise

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EBRO
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ITEM: 625
DATE:06/06/75

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DISCIPLINE ---------- B14 Atmospheric Radio Noise
STATION LATITUDE ---------- N 40.82
STATION LONGITUDE ---------- E .49
ALTERNATE NAMES ---------- Tortosa
DATES OF OPERATION ---------- 01/1958 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ------ Atmospheric radio noise, continuous, integrated in order to observe SEAs
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------- 1 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Observatorio del Ebro
Roquetas Tarragona
Spain

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS -------

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HESTMONA NORWAY

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ITEM: 1016
DATE:12/03/75 2 C

DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 66.53
STATION LONGITUDE ----------	E 12.85
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	05/1967 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (3 ITT AN/WRN-2 receivers).
RAW DATA ----------	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding Officer OMEGA Nav Sys Oper D US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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B14 Atmospheri

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KINGSTON
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ITEM: 311
DATE:22/05/75 2d

DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 41.31
STATION LONGITUDE ----------	E 288.27
ALTERNATE NAMES ----------	Kingston Elf Station Univ. of Rhode Island - ELF
DATES OF OPERATION ---------	01/1967 to present Intermittent operation
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	ELF (Extremely Low Frequency) magnetic and electric field receivers, 3-30 Hz, 2 orthogonal components of horizontal magnetic field--vertical coils, 44 000 turns, 2 m diameter, sensitivity milligamma/square root of Hz; Vertical electric field--10 m high ball antenna. Recording is continuous (except during local thunderstorm) on 0.0375 IPS magnetic tape.
RAW DATA ----------	Analog magnetic tape
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	4 MONTHS
FORM OF REDUCED DATA ----------	Graphical plots
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Charles Polk University of Rhode Island Dept of Electrical Engineering Kingston RI USA 02881
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Integrated power spectra of selected periods available on digital magnetic tape; paper charts showing availability of data periods and unusual level changes also available. Regular data are summaries of amplitude data; special data are power spectra of selected periods, usually available after 4 months. Station information in AFGL GEOPHYSICS AND SPACE DATA BULLETIN, Vol X, No 1, 1973. Description of electric field equipment and calibration in IEEE TRANS ON ANTENNAS AND PROPAGATION, Vol AP-21, 7/1973

eric Radio Noise (Cont.)

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KUHLUNGSBORN
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ITEM: 982
DATE:11/08/75 3

DISCIPLINE	B14 Atmospheric Radio Noise
STATION LATITUDE	N 54.12
STATION LONGITUDE	E 11.77
ALTERNATE NAMES	
DATES OF OPERATION	1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Radiosets on various frequencies in the HF, MF, LF, and VLF range, 33 MHz radar equipment, continuous atmospheric noise measurements
RAW DATA	Paper records, some film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	GEOPHYSIKALISCHE BEOBACHTUNGS-ERGEBNISSE (Geophysical Data) monthly bulletin
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Dr. K. Sprenger Observatorium fur Ionospharenfors Mitschurin Str. 4-6 Kuhlungsborn German Dem Rep DDR 2565
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The monthly bulletin Geophysical Data is available from Akad. de. Wissenschaften der DDR, Zentralinstitut fur solar-terrestrische Physik (HHI), DDR 1199 Berlin-Adlershof.

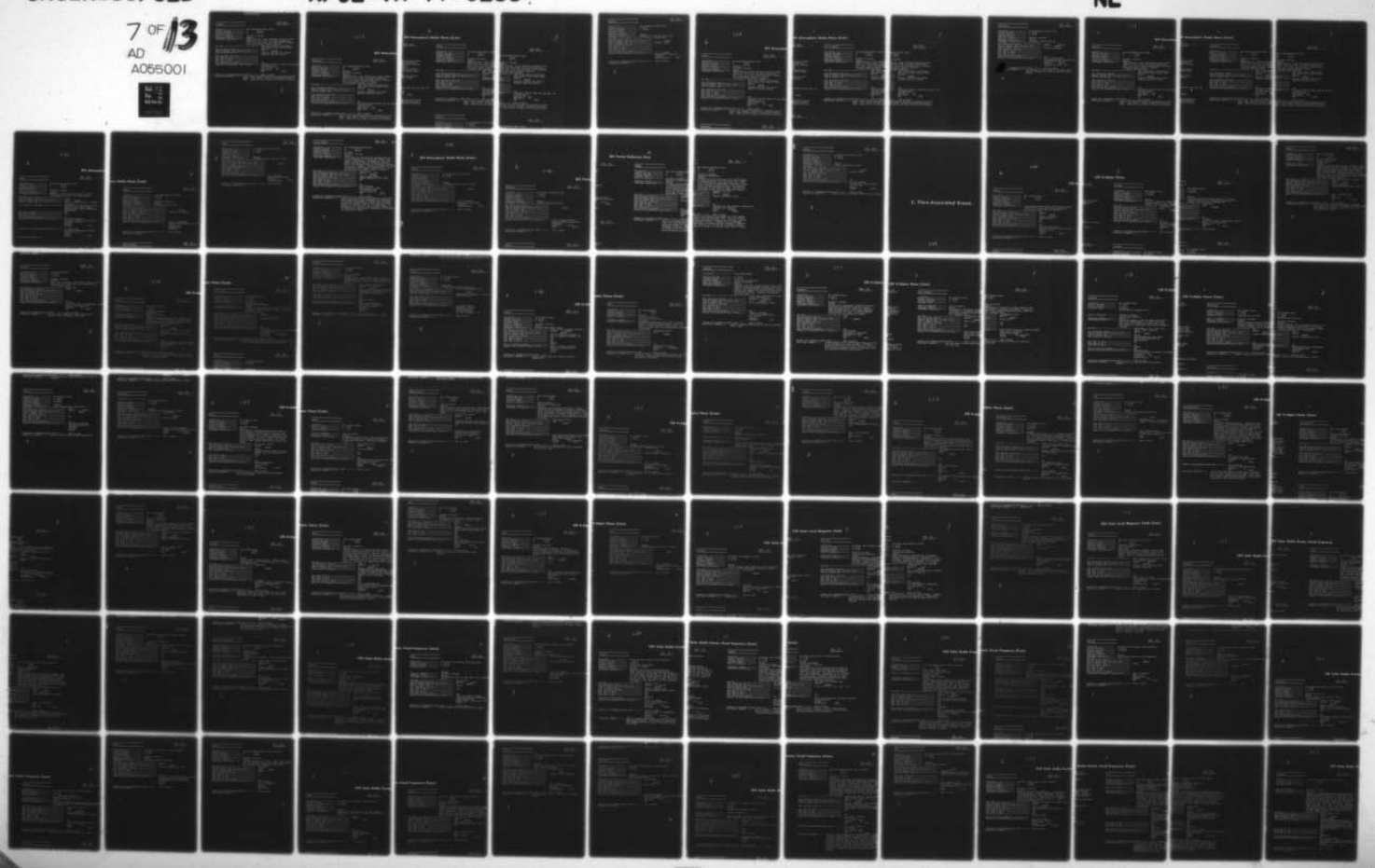
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LA MOURE
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DISCIPLINE	B14 Atmospheric Radio Noise
STATION LATITUDE	N 46.56
STATION LONGITUDE	E 261.36
ALTERNATE NAMES	
DATES OF OPERATION	10/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	OMEGA Receiver, [illegible]

AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

UNCLASSIFIED AFGL-TR-77-0255 NL

7 OF 13
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tut fur solar-terrestrische Physik (HHI), DDR 1199
Berlin-Adlershof.

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LA MOURE
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ITEM: 1025
DATE:12/03/75

DISCIPLINE	B14 Atmospheric Radio Noise
STATION LATITUDE	N 46.56
STATION LONGITUDE	E 261.36
ALTERNATE NAMES	
DATES OF OPERATION	10/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h).
RAW DATA	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Commanding Officer OMEGA Nav Sys Oper US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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B14 Atmospher

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ITEM: 1022
DATE:12/03/75 3c

DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 21.31
STATION LONGITUDE ----------	E 202.35
ALTERNATE NAMES ----------	Honolulu
DATES OF OPERATION ----------	03/1972 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (4 ITT AN/URN-18 (XN-1) receivers).
RAW DATA ----------	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding Officer OMEGA Nav Sys Oper D US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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B14 Atmospheric Radio Noise (Cont.)

ITEM: 1022
DATE:12/03/75 3c

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ording instruments
60 monitor stations.

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NORFOLK
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DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 36.82
STATION LONGITUDE ----------	E 285.71
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase diffe signals at one or more of t 10.2, 11.3, 13.6 kHz, digit from strip charts (speed 1 (1 Tracor 599R receiver).
RAW DATA ----------	Some strip c some coding
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MC
FORM OF REDUCED DATA ----------	Computer pri magnetic tap
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding C US Coast Gua 2100 2nd St. Washington USA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as abov
ADDITIONAL COMMENTS -----	Some Cesium Standard available phase. Some signal strength r used. Plans are for as many a

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DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 49.92
STATION LONGITUDE ----------	E 14.98
ALTERNATE NAMES ----------	

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ITEM: 1037
DATE:12/03/75 32

814 Atmospheric Radio Noise
N 36.82
E 285.71

01/1971 to present
Regular
OMEGA Receiver, phase differences between OMEGA
signals at one or more of these frequencies:
10.2, 11.3, 13.6 kHz, digitized hourly readings
from strip charts (speed 1 inch/h).
(1 Tracor 599R receiver).
---------- Some strip charts (continuous),
some coding forms (hourly data)
---------- Regular
AFTER ------ 2 MONTHS
---------- Computer printout data blocks,
magnetic tape data blocks

---------- Yes
TATION ----- Commanding Officer OMEGA Nav Sys Oper Det
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ATA -------- Same as above
Cesium Standard available for measuring one-way
ge. Some signal strength recording instruments
l. Plans are for as many as 60 monitor stations.

ITEM: 804
DATE:00/00/75

14 Atmospheric Radio Noise
49.92

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ITEM: 804

DATE:00/00/75

DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 49.92
STATION LONGITUDE ----------	E 14.98
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Atmospheric Radio Noise at 27 kHz
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. L. Krivsky Astronomical Institute Ondrejov Czechoslovakia 25165
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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B14 Atmospher

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PIARCO
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ITEM: 1043
DATE:12/03/75 4 b

DISCIPLINE ---------- B14 Atmospheric Radio Noise
STATION LATITUDE ---------- N 10.60
STATION LONGITUDE ---------- E 298.65
ALTERNATE NAMES ---------- Trinidad
DATES OF OPERATION ---------- 01/1972 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 ITT AN/URN-18 (XN-1) receivers)
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper D
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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PING-CHENG
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ITEM: 462
DATE:18/02/76 4

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B14 Atmospheric Radio Noise (Cont.)

EM: 1043
TE:12/03/75 4 h

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frequencies:
hourly readings
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ing instruments
monitor stations.

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DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	S 22.87
STATION LONGITUDE ----------	E 316.87
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	09/1973 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differe signals at one or more of the 10.2, 11.3, 13.6 kHz, digitiz from strip charts (speed 1 in (2 Tracor 599R receivers).
RAW DATA ----------	Some strip cha some coding fo
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONT
FORM OF REDUCED DATA ----------	Computer print magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding Off US Coast Guard 2100 2nd St., Washington USA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available f phase. Some signal strength rec used. Plans are for as many as

EM: 462
TE:18/02/76 4

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ITEM: 1031
DATE:12/03/75 4d

ospheric Radio Noise
22.87
316.87

to present

eceiver, phase differences between OMEGA
at one or more of these frequencies:
1.3, 13.6 kHz, digitized hourly readings
rip charts (speed 1 inch/h).
or 599R receivers).
----- Some strip charts (continuous),
some coding forms (hourly data)
----- Regular
----- 2 MONTHS
----- Computer printout data blocks,
magnetic tape data blocks

----- Yes
----- Commanding Officer OMEGA Nav Sys Oper Det
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

----- Same as above
n Standard available for measuring one-way
ne signal strength recording instruments
ns are for as many as 60 monitor stations.

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PING-CHENG

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ITEM: 462

DATE:18/02/76 4

DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 24.95
STATION LONGITUDE ----------	E 121.23
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	06/1967 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Atmospheric Radio Noise RX
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Computer printouts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Yinn-Nien Huang Telecommunication Laboratories Chung-Li P.O. Box 71 Chung-Li Taiwan Republic of China 320
RESS FOR INFORMATION ABOUT DATA --------	Same as above
ITIONAL COMMENTS -----	The station will be closed in the near future. Special purpose data usually available after 3 months

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B14 Atmosphe

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ITEM: 1019
DATE:12/03/75

DISCIPLINE	B14 Atmospheric Radio Noise
STATION LATITUDE	N 39.18
STATION LONGITUDE	E 9.16
ALTERNATE NAMES	
DATES OF OPERATION	02/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 Tracor 599R receivers).
RAW DATA	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Commanding Officer OMEGA Nav Sys Oper US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

14 Atmospheric Radio Noise (Cont.)

: 1019
:12/03/75

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DISCIPLINE	B14 Atmospheric Radio Noise
STATION LATITUDE	S 18.92
STATION LONGITUDE	E 47.55
ALTERNATE NAMES	
DATES OF OPERATION	04/1971 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	OMEGA Receiver, phase difference signals at one or more of these 10.2, 11.3, 13.6 kHz, digitized from strip charts (speed 1 inch/ (3 Tracor 599R receivers).
RAW DATA	Some strip charts some coding forms
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Computer printout magnetic tape dat
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Commanding Office US Coast Guard 2100 2nd St., S.W Washington DC USA
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Some Cesium Standard available for phase. Some signal strength record used. Plans are for as many as 60

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ITEM: 1040
DATE:12/03/75

B14 Atmospheric Radio Noise
S 18.92
E 47.55

04/1971 to present
Regular
OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (3 Tracor 599R receivers).

---------- Some strip charts (continuous), some coding forms (hourly data)
---------- Regular
E AFTER ------ 2 MONTHS
---------- Computer printout data blocks, magnetic tape data blocks

Yes
T STATION ----- Commanding Officer OMEGA Nav Sys Oper Det
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

T DATA -------- Same as above
Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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B14 Atmospheri

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ITEM: 1058
DATE:28/03/75

DISCIPLINE	B14 Atmospheric Radio Noise	
STATION LATITUDE	N	46.90
STATION LONGITUDE	E	17.89
ALTERNATE NAMES		
DATES OF OPERATION	09/1954 to present	
OBSERVING SCHEDULE	Regular	
INSTRUMENT DESCRIPTION	Atmospheric Radio Noise Recorder on 27 kHz, continuous recordings, chart speed 20mm/h	
RAW DATA		
DATA REDUCTION PRACTICE	Regular	
REGULAR REDUCED DATA AVAILABLE AFTER	6-12 MONTHS	
FORM OF REDUCED DATA	Tables, graphical plots, computer printouts	
DATA ROUTINELY PUBLISHED	Publication of the Hungarian Geophysical Inst Roland Eotvos ANNUAL REPORT TIHANY GEOPHYSICAL OBSERVATORY	
DATA SENT TO WDC-A	Yes	
DATA SENT TO WDC-B	Yes	
DATA SENT TO WDC-C		
DATA AVAILABLE ON REQUEST	Yes	
ADDRESS FOR INFORMATION ABOUT STATION	Mr. Laszlo Hegymegi Hungarian Geophysical Institute Columbus u. 17-23 Budapest Hungary H - 1145	
ADDRESS FOR INFORMATION ABOUT DATA	Dr. Peter Toth Hungarian Geophysical Institute Kossuth L. u. 81. Tihany Hungary H - 8237	
ADDITIONAL COMMENTS		

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heric Radio Noise (Cont.)

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ITEM: 814
DATE: 00/00/75

DISCIPLINE	B14 Atmospheric Radio Noise
STATION LATITUDE	S 54.80
STATION LONGITUDE	E 291.70
ALTERNATE NAMES	
DATES OF OPERATION	01/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Atmospheric Radio Noise
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Bulletins or reports
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. I. Mesterman Avenida del Libertador No. 327 Vicente Lopez Buenos Aires Argentina
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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VALLEY COTTAGE
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ITEM: 657
DATE: 13/03/75

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ITEM: 799
DATE:00/00/75

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DISCIPLINE ---------- B14 Atmospheric Radio Noise
STATION LATITUDE ---------- N 50.30
STATION LONGITUDE ---------- E 16.01
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Atmospheric Radio Noise at 27 kHz
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. L. Krivsky
Astronomical Institute
Ondrejov
Czechoslovakia 25165

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS -----

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VALLEY COTTAGE
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ITEM: 657
DATE:13/03/75

DISCIPLINE	B14 Atmospheric Radio Noise
STATION LATITUDE	N 41.07
STATION LONGITUDE	E 286.45
ALTERNATE NAMES	A1 AAVSO
DATES OF OPERATION	03/1955 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	4 VLF receivers and recorder (graphic) for indirect Detection of Solar Flares, sudden ionospheric disturbances. Designed and built most modern integrated circuit receivers (costing about $35) for many of our 41 worldwide stations in our group network. Observing schedule 24 hour continuous. Chart speed 1 inch per hour. Reporting monthly to NOAA, Boulder, Colorado.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, paper tape
DATA ROUTINELY PUBLISHED	SOLAR GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	David Warshaw Solar Division, AAVSO 141 Quaspeck Blvd Valley Cottage NY USA 10989
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Continuously monitor by radio receivers in the VLF region and record sudden enhancement of atmospherics; sudden enhancement of signals and short wave fadeouts and record these on strip chart recorders moving at 1 inch per hour on a 24 hour basis. D. Warshaw is the creator of the worldwide network of 41 observers of the American Association of Variable Star Observers (AAVSO).

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B14 Atmospheric Radio Noise (Cont.)

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VSETIN
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ITEM: 806
DATE:00/00/75

DISCIPLINE ----------	B14 Atmospheric Radio Noise
STATION LATITUDE ----------	N 49.21
STATION LONGITUDE ----------	E 17.59
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Atmospheric Radio Noise at 35 kHz
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. L. Krivsky Astronomical Institute Ondrejov Czechoslovakia 25165
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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242

B15 Partia

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AHMEDABAD
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ITEM: 735
DATE: 00/00/75

DISCIPLINE ---------- B15 Partial Reflection Data
STATION LATITUDE ---------- N 23.01
STATION LONGITUDE ---------- E 72.60
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Partial Reflection Sounder
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Ram Gopal Rastogi
Physical Research Laboratory
Navrangpura
Ahmedabad Gujarat
India 380009

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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ITEM: 708
DATE: 00/00/75

B15 Partial Reflection Data

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B15 Partial Reflection Data

ITEM: 735
DATE:00/00/75

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URBANA
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DISCIPLINE	B15 Partial Reflection
STATION LATITUDE	N 40.17
STATION LONGITUDE	E 271.84
ALTERNATE NAMES	
DATES OF OPERATION	11/1972 to present Operation intermittent
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	D-region partial refle of electron density 70 tron densities are cal ential absorption meas od of one hour centere world days diurnal run processed in real time
RAW DATA	Compute
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	0
FORM OF REDUCED DATA	Compute
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Aeronom Univers Urbana USA
ADDRESS FOR INFORMATION ABOUT DATA	Same as
ADDITIONAL COMMENTS	Data are available from N except for June-September other short gaps (one day equipment failures. Redu printouts of electron den ly. Plots of 72, 76.5 and and 81 km AX/AO are avail

ITEM: 708
DATE:00/00/75

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ITEM: 652
DATE:12/03/75 1C

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-- B15 Partial Reflection Data
-- N 40.17
-- E 271.84
--
-- 11/1972 to present
Operation intermittent
-- Regular
-- D-region partial reflections, daily observations of electron density 70 to 85 km at noon. Electron densities are calculated from daily differential absorption measurements taken over a period of one hour centered at noon. On quarterly world days diurnal runs are made. The data are processed in real time on a PDP-15/40 computer.
---------- Computer printouts
---------- Regular
BLE AFTER ------- 0 MONTHS
---------- Computer printouts, plots

---------- Yes
UT STATION ------ Aeronomy Lab, Dpt Electrical Engineering
University of Illinois
Urbana Illinois
USA 61801

UT DATA --------- Same as above
Data are available from November 20, 1972 onwards, except for June-September 1974. There are several other short gaps (one day up to one week) caused by equipment failures. Reduced data are computer printouts of electron density, available immediately. Plots of 72, 76.5 and 81 km electron density, and 81 km AX/AO are available after about 2 months.

ADDITIONAL COMMENTS ------

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TROMSO
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ITEM: 708
DATE:00/00/75

DISCIPLINE ---------- B15 Partial Reflection Data
STATION LATITUDE ---------- N 69.70
STATION LONGITUDE ---------- E 19.00
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Partial Reflection Sounder
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Magnetic tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Mr. Ove Bratteng
Auroral Obs, Univ of Tromso
P.O. Box 953
Tromso
Norway N-9001

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Copies of data on request, limited by our capacity.

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C. Flare-Associated Events

244

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C01 H-

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ARCETRI
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ITEM: 1080
DATE:23/08/76 1a

DISCIPLINE ----------	C01 H-Alpha Flares	
STATION LATITUDE ----------	N	43.75
STATION LONGITUDE ----------	E	11.25
ALTERNATE NAMES ----------		
DATES OF OPERATION ----------		
OBSERVING SCHEDULE ----------		
INSTRUMENT DESCRIPTION -----	H-alpha/Spectroheliograph, observing daily 0900-1100 UT for H-alpha and Calcium filtergrams: spectroheliograms: 1/day, if possible.	
RAW DATA ----------	Film	
DATA REDUCTION PRACTICE ----------	Regular	
REGULAR REDUCED DATA AVAILABLE AFTER ------	1	MONTHS
FORM OF REDUCED DATA ----------	Computer printouts	
DATA ROUTINELY PUBLISHED ----------	Monthly Report	
DATA SENT TO WDC-A ----------	Yes	
DATA SENT TO WDC-B ----------	Yes	
DATA SENT TO WDC-C ----------		
DATA AVAILABLE ON REQUEST ----------	Yes	
ADDRESS FOR INFORMATION ABOUT STATION -----	Giuseppe Tagliaferri Osservatorio Astrofisico di Arcetri Largo E. Fermi, 5 Firenze Italy 50125	
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above	
ADDITIONAL COMMENTS -----		

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ATHENS
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ITEM: 1150
DATE:15/05/75 1b

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C01 H-Alpha Flares

: 1080
:23/08/76 1a

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BIG BEAR
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DISCIPLINE ----------	C01 H-Alpha Flares
STATION LATITUDE ----------	N 34.16
STATION LONGITUDE ----------	E 243.49
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Full disk refractor, H-alpha p vacuum refractor, full disk so H-alpha, 20 s intervals, 1400-
RAW DATA ----------	35 mm film
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTH
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	H. Zirin California Inst. 1201 E. Califor Pasadena USA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

: 1150
:15/05/75 1b

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BIG BEAR
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DISCIPLINE ----------	C01 H-alpha Flares
STATION LATITUDE ----------	N 34.16
STATION LONGITUDE ----------	E 243.49

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******* ITEM: 57 1c
DATE:14/07/75
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----- C01 H-Alpha Flares
----- N 34.16
----- E 243.49

----- Regular
----- Full disk refractor, H-alpha patrol. 8.6 inch
vacuum refractor, full disk solar observations in
H-alpha, 20 s intervals, 1400-0100 UT.
---------- 35 mm film
---------- None
AILABLE AFTER ------ MONTHS

) ----------

ST ---------- Yes
ABOUT STATION ----- H. Zirin
California Inst. of Technology, 354-33
1201 E. California Blvd.
Pasadena CA
USA 91125

ABOUT DATA -------- Same as above
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******* ITEM: 58 1d
DATE:14/07/75
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----- C01 H-alpha Flares
----- N 34.16
----- E 243.49

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ATHENS
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ITEM: 1150
DATE:15/05/75

DISCIPLINE	C01 H-Alpha Flares
STATION LATITUDE	N 37.85
STATION LONGITUDE	E 23.72
ALTERNATE NAMES	OL-C, 2 Weather Wing
DATES OF OPERATION	12/1965 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Razdow WS-250 Optical Telescope (H-alpha); AFGL Radio Telescopes, AFGL Polarimeter; observatory operates from sunrise to sunset daily, monitors four discrete radio frequencies (1415, 2695, 4995, and 8800 MHz); takes photos of the solar disk at a rate of 1 frame/min; monitors five high frequency receivers for detection of SWFs; monitors total electron content.
RAW DATA	Film, strip charts, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Logs, chart rolls
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	OL-C, 2 Weather Wing APO New York NY USA 09223
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data are at the National Observatory of Athens. The observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

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ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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BIG BEAR
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ITEM: 58
DATE:14/07/75

DISCIPLINE ---------- C01 H-alpha Flares
STATION LATITUDE ---------- N 34.16
STATION LONGITUDE ---------- E 243.49
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 09/1969 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- White light telescope, white light patrol, 6 inch refractor, full disk white light observations, 1 or 2 frames daily.
RAW DATA ---------- 70 mm film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- H. Zirin
California Inst. of Technology, 354-33
1201 E. California Blvd.
Pasadena CA
USA 91125

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Big Bear Solar Observatory, North Shore Drive, Big Bear City, California, USA 92314

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C01 H-Alp

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BOULDER

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ITEM: 929

DATE:18/02/75

DISCIPLINE	C01 H-Alpha Flares
STATION LATITUDE	N 39.98
STATION LONGITUDE	E 254.72
ALTERNATE NAMES	Boulder Observatory SOLTERWARN
DATES OF OPERATION	05/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	H-alpha Telescope (Razdow W120), eyepiece, TV monitor, 35 mm film, sunrise to sunset patrol. Daily photos and flare reports in real time to Forecast Center and IUWDS Network.
RAW DATA	35 mm film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	35 mm film, flare lists, coded reports
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Space Environment Services Center Space Environment Lab, ERL, NOAA 325 Broadway Boulder CO USA 80302
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of the US National Operational Flare Patrol Network. Data are available in real time to other Regional Warning Centers.

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ITEM: 933

pha Flares (Cont.)

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BUENOS AIRES
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ITEM: 934
DATE:24/02/76

DISCIPLINE	C01 H-Alpha Flares
STATION LATITUDE	S 34.55
STATION LONGITUDE	E 301.27
ALTERNATE NAMES	San Miguel
DATES OF OPERATION	01/1968 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	H-alpha Spectroheliograph, Gregory axis, 30 cm aperture in solar tower 12 m high. 3 frames during the day.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Photographic paper
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	San Miguel Observatorio Nacional de Fisica Cosm Av. Mitre 3100 San Miguel Buenos Aires Argentina 1663
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Intermittent operation -- some minor interruptions due to mechanical and electronical problems.

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CAPRI F
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ITEM: 769
DATE:00/00/75

DISCIPLINE	C01 H-alpha Flares
STATION LATITUDE	N 40.55
STATION LONGITUDE	E 14.22
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Occasional

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BUCHAREST
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ITEM: 933
DATE: 07/04/75

DISCIPLINE	C01 H-Alpha Flares
STATION LATITUDE	N 44.41
STATION LONGITUDE	E 26.05
ALTERNATE NAMES	
DATES OF OPERATION	1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	H-alpha Filter, photographic patrol of the chromosphere with 1/2A Hale Filter (refractor 10/150 cm) with 15 and 40 mm diameter image of the sun.
RAW DATA	Film, photographic plate
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, film, photographic prints
DATA ROUTINELY PUBLISHED	OBSERVATIONS SOLAIRES, SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Meudon; Zurich
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Calin Popovici Astronomical Observatory Cutitul de argint 5 Bucharest Romania
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 2 months.

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ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ------ Intermittent operation -- some minor interruptions due to mechanical and electronical problems.

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CAPRI F
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ITEM: 769
DATE:00/00/75

DISCIPLINE ---------- C01 H-alpha Flares
STATION LATITUDE ---------- N 40.55
STATION LONGITUDE ---------- E 14.22
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ------ H-alpha 6563A Cinema Flare Patrol
RAW DATA ---------- 35 mm cinematographic film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Photographic negatives, prints, in black and white
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Anton Bruzek
Fraunhofer Institut
Schoeneckstrasse 6
Freiburg Breisgau
Fed Rep of Germany D 78

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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246

C01 H-Alp

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CATANIA
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ITEM: 97
DATE:03/02/76

DISCIPLINE ---------- C01 H-Alpha Flares
STATION LATITUDE ---------- N 37.50
STATION LONGITUDE ---------- E 15.08
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- H-alpha Cinema Flare Patrol
RAW DATA ---------- Films, tables, computer printouts
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer printouts
DATA ROUTINELY PUBLISHED ---------- Pub. of Catania Astrophys. Obs.
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Meudon
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. P. Maffei, Director
Osservatorio Astrofisico
Catania
Italy

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS ----- Special purpose data are usually available immediately.

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ITEM: 129
DATE:22/04/75

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EBRO
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ITEM: 1062
DATE:06/06/75

DISCIPLINE	C01 H-Alpha Flares
STATION LATITUDE	N 40.82
STATION LONGITUDE	E .49
ALTERNATE NAMES	Tortosa
DATES OF OPERATION	01/1964 to present Intermittent operation
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Automatic monochromatic Lyot filter, chromospheric automatic cinematography, about 2-3h daily at a rate speed of 1 photo every 3 min: every 11 photos, one is overexposed for recordin prominences.
RAW DATA	Photographic film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Observatorio del Ebro Roquetas Tarragona Spain
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Equipment operated occasionally, normally about 2h every day: from 1/1/1964 to 24/2/1967 and from 19/6/1972 to 24/5/1974.

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CULGOORA
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ITEM: 129
DATE:22/04/75

DISCIPLINE	C01 H-alpha Flares
STATION LATITUDE	S 30.33
STATION LONGITUDE	E 149.57
ALTERNATE NAMES	I.P.S. Solar Observatory
DATES OF OPERATION	06/1974 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Continuous daylight to dark visual (thru 5 inch diameter objective Razdow Telescope) and photographic (one exposure/60 s) solar patrol. Continuous solar patrol to assist with ionospheric disturbance warnings. Intend to operate for many many years.
RAW DATA	35 mm black and white film (negatives and positives)
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Films, photographic prints
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Officer in Charge I.P.S. Solar Observatory P.O. Box 372 Narrabri Australia 2390
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose observations are usually available after 1 day.

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C01 H-Alpha

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HALEAKALA
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ITEM: 226
DATE:26/01/76

DISCIPLINE ---------- C01 H-alpha Flares
STATION LATITUDE ---------- N 20.71
STATION LONGITUDE ---------- E 203.74
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1964 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- H-alpha Filter Telescope, cinema flare patrol. Instrument incorporates 0.5A Halle filter. Image diameter 1.4 cm. Observing schedule is normally 1800-2400 UT daily except weekends, with exposures at 1/min. During periods of activity this is increased to 10/min.

RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Marie McCabe
Institute for Astronomy
2680 Woodlawn Drive
Honolulu HI
USA 96822

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- 9/1964-9/1969 Data was reduced and tables of flares and prominences, etc. sent to WDC-A. 10/1969-present Patrol hours only sent to WDC-A. Prior to 1974 observing schedule covered all daylight hours with periods of shorter observations.

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C01 H-Alpha Flares (Cont.)

: 226
:26/01/76

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DISCIPLINE ----------	C01 H-alpha Flares
STATION LATITUDE ----------	N 43.93
STATION LONGITUDE ----------	E 5.72
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Monochromatic Heliograph, H-alph chromosphere, automatic instrume every day, H-alpha observations ter, bandpass 0.75A.
RAW DATA ----------	Photographic fil
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Flare lists
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Dept d'Astr Solai Observatoire de Place Jules Jans Meudon H France
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	The instrument has been shut down 1973 and 1974.

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ITEM: 242
DATE:01/04/75 4a

01 H-alpha Flares
43.93
5.72

957 to present
egular
onochromatic Heliograph, H-alpha images of the
hromosphere, automatic instrument, 1 image/min,
very day, H-alpha observations with a Lyot fil-
er, bandpass 0.75A.
---------- Photographic films
---------- Regular
FTER ------ 1 MONTHS
---------- Flare lists

---------- Yes
---------- Yes

ATION ----- Dept d'Astr Solaire et Planetaire DASOP
Observatoire de Meudon
Place Jules Jansen
Meudon Hauts de Seine
France 92190

TA -------- Same as above
instrument has been shut down for service in
and 1974.

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C01 H-Alph

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HURBANOVO
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ITEM: 273
DATE:16/06/75

DISCIPLINE	C01 H-alpha Flares
STATION LATITUDE	N 47.87
STATION LONGITUDE	E 15.21
ALTERNATE NAMES	Hurbanovo Slovak Center of Amateur Astro
DATES OF OPERATION	09/1968 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Spectrohelioscope is used for observing H-alpha flares and measurements of H-alpha line width. Data about the H-alpha line width during flare and position are tabulated. The flare is observed visually.
RAW DATA	Photographic plate, film, strip chart, tables, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA), IAU QUARTERLY BULLETIN ON SOLAR ACTIVITY
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Meudon
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Bohuslav Lukac The Slovak Center of Amateur Astronomy Komarnanska x 65 Hurbanovo SSR Czechoslovakia 947 01
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Observations were intermittent from 11/1972 to 12/1973.

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ITEM: 960
DATE:23/06/75

C01 H-Alpha Flares (Cont.)

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16/06/75

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DISCIPLINE ----------	C01 H-Alpha Flares
STATION LATITUDE ----------	N 46.68
STATION LONGITUDE ----------	E 13.91
ALTERNATE NAMES ----------	Sonnenobs der Univ Graz
DATES OF OPERATION ----------	05/1972 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Patrol Telescope with 0.7A H-alpha diameter objective, Lyot filter, diameter changed to 22 mm in the sq mm film format, max. 6 frames/
RAW DATA ----------	Film
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Tables, photograph
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Sonnenobservatoriu Universitaet Graz Sattendorf Austria
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available after

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DAT

DISCIPLINE ----------	C01 H-alpha Flares
STATION LATITUDE ----------	N 10.20
STATION LONGITUDE ----------	E 77.50

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ITEM: 962
DATE:27/05/75

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-- C01 H-Alpha Flares
-- N 46.68
-- E 13.91
-- Sonnenobs der Univ Graz

-- 05/1972 to present
-- Regular
-- Patrol Telescope with 0.7A H-alpha filter, 10 cm diameter objective, Lyot filter, 15 mm image diameter changed to 22 mm in the future, 24x36 sq mm film format, max. 6 frames/min.

---------- Film
---------- Special
BLE AFTER ------ MONTHS
---------- Tables, photographic prints

---------- Yes
UT STATION ----- Sonnenobservatorium Kanzelhoehe
Universitaet Graz
Sattendorf
Austria A-9520

UT DATA -------- Same as above
Special purpose data available after 1 month.

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ITEM: 764
DATE:00/00/75

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C01 H-alpha Flares

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Observations were intermittent from 11/1972 to 12/1973.

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ITEM: 960

KANDILLI

DATE:23/06/75

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DISCIPLINE ---------- C01 H-Alpha Flares
STATION LATITUDE ---------- N 41.06
STATION LONGITUDE ---------- E 29.06
ALTERNATE NAMES ---------- Istanbul
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Solar observations, Lyot Filters
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Kandilli Observatory
Heliophysics Service
Cengelkoy
Istanbul
Turkey

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available immediately.

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 1 month.

****
KODAIKANAL
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ITEM: 764
DATE:00/00/75

DISCIPLINE ----------
C01 H-alpha Flares
STATION LATITUDE ---------- N 10.20
STATION LONGITUDE ---------- E 77.50
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ H-alpha visual flare patrol, 6563A
RAW DATA ---------- Photographs
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. J. C. Bhattacharya
Indian Institute of Astrophysics
Hebbal Bangalore
India 560006

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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C01 H-Alp

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MANILA
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ITEM: 998
DATE:24/04/75

DISCIPLINE ---------- C01 H-Alpha Flares
STATION LATITUDE ---------- N 14.64
STATION LONGITUDE ---------- E 121.08
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Solar Optical Telescope with H-alpha filter, 10 inch aperture, H-alpha image of sun by visual, electro-optical and photographic (lapsed time), 35 mm photograph at 1 minute intervals from sunrise to sunset. Service is part of USAF First Weather Wing Solar Activity Patrol with other sites in Iran, Athens, Puerto Rico, Boulder and Hawaii.

RAW DATA ---------- 35 mm film, records
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- Monthly Activity Report to First Weather Wing and associated stations
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Manila Observatory
P.O. Box 1231
Manila
Philippines D 404

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ----- Auxiliary equipment: Vacuum spectroheliograph, white light camera.

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MCMATH-HULBERT
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ITEM: 1076
DATE:27/03/75

DISCIPLINE ---------- C01 H-Alpha Flares

pha Flares (Cont.)

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MEUDON
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ITEM: 400
DATE:01/04/75

DISCIPLINE	C01 H-alpha Flares
STATION LATITUDE	N 48.80
STATION LONGITUDE	E 2.23
ALTERNATE NAMES	
DATES OF OPERATION	1956 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Monochromatic heliograph; H-alpha observations of the chromosphere. Automatic instrument. 1 image/min, every day, Lyot filter bandpass 0.75A.
RAW DATA	Photographic film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Lists of flares
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dept Astr Solaire et Planetaire (DA Observatoire de Meudon Place Jules Jansen Meudon Hauts de Seine France 92190
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MEUDON
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ITEM: 1006
DATE:01/04/75

DISCIPLINE	C01 H-Alpha Flares
STATION LATITUDE	N 48.80
STATION LONGITUDE	E 2.23

ADDITIONAL COMMENTS ----- Auxiliary equipment: Vacuum spectroheliograph, white light camera.

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MCMATH-HULBERT

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ITEM: 1076
DATE: 27/03/75

DISCIPLINE ----------	C01 H-Alpha Flares
STATION LATITUDE ----------	N 42.66
STATION LONGITUDE ----------	E 276.74
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1932 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	High resolution solar Spectrograph, Spectroheliograph, H-alpha Photoheliograph; solar activity plages (Ca II and H-alpha), solar flares, sunspots
RAW DATA ----------	Films, strip charts
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA) QUARTERLY BULLETIN SOLAR ACTIVITY
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	McMath-Hulbert Observatory University of Michigan 895 N. Lake Angelus Road Pontiac MI USA 48055
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ADDITIONAL COMMENTS -----

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MEUDON
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ITEM: 1006
DATE:01/04/75

DISCIPLINE ---------- C01 H-Alpha Flares
STATION LATITUDE ---------- N 48.80
STATION LONGITUDE ---------- E 2.23
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1967 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Heliograph with variable wavelength, H-alpha images of the chromosphere, automatic instrument with 1 image/min, each observation begins at the center of H-alpha, 1 view at H-alpha-0.7A, 1 view at H-alpha+0.7A, Lyot filter bandpass 0.75A. Observations made during interesting active periods on the sun.

RAW DATA ---------- Photographic films
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Dept dAstronomie Solaire et Planeta
Observatoire de Meudon, DASOP
Place Jules Jansen
Meudon Hauts de Seine
France 92190

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- The instrument was displaced to Sines (Portugal) in 1971 for a year.

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C01 H-Alpl

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ONDREJOV
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ITEM: 802
DATE:00/00/75

DISCIPLINE ----------	C01 H-alpha Flares
STATION LATITUDE ----------	N 49.92
STATION LONGITUDE ----------	E 14.98
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	H-alpha/Spectroheliograph at 6563A
RAW DATA ----------	Magnetic tape
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter, microfilm
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. L. Krivsky Astronomical Institute Ondrejov Czechoslovakia 25165
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	Co-investigators: Dr. V. Bumba and Mr. Antonin Tlamicha.

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PALEHUA
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ITEM: 1118
DATE:15/05/75

DISCIPLINE ----------	C01 H-Alpha Flares
STATION LATITUDE ----------	N 21.30

lpha Flares (Cont.)

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PENTELI
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ITEM: 907
DATE: 18/03/75

DISCIPLINE	C01 H-Alpha Flares
STATION LATITUDE	N 38.05
STATION LONGITUDE	E 23.86
ALTERNATE NAMES	Athens National Observatory of Athens
DATES OF OPERATION	05/1965 to present Station moved
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	Razdow H-alpha telescope, visual and photographic H-alpha patrol with a 10 inch refractor (one picture per minute).
RAW DATA	Film, photographic paper
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Tables, films, photographic paper
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Meudon, France
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Astronomical Institute National Observatory of Athens Athens Greece 306
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 0.5 months. Station moved in 5/1973 from N37.97 E23.72.

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PALEHUA

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ITEM: 1118
DATE:15/05/75

DISCIPLINE ----------	C01 H-Alpha Flares
STATION LATITUDE ----------	N 21.38
STATION LONGITUDE ----------	E 201.93
ALTERNATE NAMES ----------	OL-D, 1 Weather Wing
DATES OF OPERATION ----------	10/1969 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-120 optical telescope (H-alpha), AFGL radio telescopes; operate from sunrise to sunset daily. Monitors 2 discrete radio frequencies: 1415 and 8800 MHz. Take 35 mm photos of the solar disk at a rate of 1 frame/min. Monitors high frequency receivers for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 1 Weather Wing APO San Francisco USA 96553
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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C01 H-Alp

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RAMEY
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ITEM: 1122
DATE:06/03/75

7a

DISCIPLINE ----------	C01 H-Alpha Flares
STATION LATITUDE ----------	N 18.50
STATION LONGITUDE ----------	E 292.80
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	08/1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	WS-250-1A Solar Optical Telescope System, used for routine flare patrol (daily from sunrise to sunset); H-alpha observations at 6563A with line shifting capability of + and - 1A; 35 mm automatic flare patrol camera (pictures taken at the rate of one per minute).
RAW DATA ----------	Film, photographic prints, forms, drawings
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 12 WSQ (MAC) Box 261 FPO New York USA 09549
ADDRESS FOR INFORMATION ABOUT DATA --------	Natl Geophys & Solar-Terrest Data Center NOAA/EDS Boulder CO USA 80302
ADDITIONAL COMMENTS -----	

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ROME
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ITEM: 743
DATE:00/00/75

7b

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SACRAMENTO PEAK
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ITEM: 498
DATE:23/06/75

DISCIPLINE	C01 H-alpha Flares
STATION LATITUDE	N 32.78
STATION LONGITUDE	E 254.68
ALTERNATE NAMES	Sac Peak
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	H-alpha flare patrol. F. L. telescope coupled to a Halle 1/2A Band Pass birefringent filter. mm image recorded on 35mm film. Observes sun from sunrise to 2400 UT. Normal rate = 1 picture per minute, flare rate = 1 picture per 5 seconds.
RAW DATA	Negative film, tables giving time and location of solar events
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables listing times and locations of solar events
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Richard B. Dunn Sacramento Peak Observatory Sunspot NM USA 88349
ADDRESS FOR INFORMATION ABOUT DATA	Lou B. Gilliam Sacramento Peak Observatory Sunspot NM USA 88349
ADDITIONAL COMMENTS	Station operates in conjunction with white light patrol.

USA 80302

ADDITIONAL COMMENTS -----

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ROME
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ITEM: 743
DATE:00/00/75

DISCIPLINE ---------- C01 H-alpha Flares
STATION LATITUDE ---------- N 41.90
STATION LONGITUDE ---------- E 12.50
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ H-alpha Spectroheliograph, 6563A
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Bulletins
DATA ROUTINELY PUBLISHED ---------- SOLAR PHENOMENA, PHOTOGRAPHIC JOURNAL OF THE SUN (monthly)
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Massimo Cimino
Observatorio Astronomico di Roma
Via del Parco Mellini, 84
Rome
Italy 00136

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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252

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C01 H-Alpl

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SACRAMENTO PEAK
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ITEM: 502
DATE:23/06/75

DISCIPLINE ----------	C01 H-alpha Flares
STATION LATITUDE ----------	N 32.78
STATION LONGITUDE ----------	E 254.68
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1955 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	1)Big dome spectroheliograph. Double pass monochrometer - 4inch solar image recorded on film. Normal schedule: daily D3, H-alpha, CaK spectroheliograms. Occasionally scedule continues observations when activity level is high. 2)Littrow spectrograph, spectra and slit jaw pictures, 13m focal length, single or double pass, occasionally scheduled, output on 35mm or 70mm film, magnetic tape, analog charts. 3)East Bench Dual Camera (began operating 4/1964), see below. 4)30cm coelostat telescope, see below.
RAW DATA ----------	4inch solar image on film
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Richard B. Dunn Sacramento Peak Observatory Sunspot NM USA 88349
ADDRESS FOR INFORMATION ABOUT DATA --------	Lou B. Gilliam Sacramento Peak Observatory Sunspot NM USA 88349
ADDITIONAL COMMENTS -----	3)East Bench Dual Camera, 10inch image, recorded on 35mm film, occasionally scheduled. 4)30cm coelostat telescope (began operating 1958), 4inch achromatic image, feeds spectroheliograph, Littrow spectrograph and East Bench Dual Camera.

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C01 H-Alpha Flares (Cont.)

502
3/06/75

le pass mono-
ded on film.
CaK spectro-
ntinues ob-
lgh.
slit jaw pic-
louble pass,
mm or 70mm
3) East Bench
, see below.
w.
film

vatory

8349

vatory

8349
recorded
)30cm coelo-
4inch achro-
ittrow spec-

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SKALNATE PLESO
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ITEM:
DATE:

DISCIPLINE	C01 H-Alpha Flares	
STATION LATITUDE	N	49.19
STATION LONGITUDE	E	20.25
ALTERNATE NAMES	Astronomical Institute	
DATES OF OPERATION	11/1943 to present	
OBSERVING SCHEDULE	Regular	
INSTRUMENT DESCRIPTION	20/304 cm C. Zeiss refractor, fine active regions in H-alpha, detailed (one picture per 3-5 minutes)	
RAW DATA	Drawings, photograph film	
DATA REDUCTION PRACTICE	Regular	
REGULAR REDUCED DATA AVAILABLE AFTER	1	MONTHS
FORM OF REDUCED DATA	Copies of drawings, paper	
DATA ROUTINELY PUBLISHED		
DATA SENT TO WDC-A		
DATA SENT TO WDC-B		
DATA SENT TO WDC-C		
DATA AVAILABLE ON REQUEST	Yes	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Julius Sykora Astronomical Inst Sk of the Slovak Acaden Tatranska Lomni Czechoslovakia	
ADDRESS FOR INFORMATION ABOUT DATA	Same as above	
ADDITIONAL COMMENTS		

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TEHRAN
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ITEM:
DATE:

DISCIPLINE	C01 H-Alpha Flares	
STATION LATITUDE	N	35.70
STATION LONGITUDE	E	51.47
ALTERNATE NAMES	OL-D, 2 Weather Wing	
DATES OF OPERATION	12/1968 to present	

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ITEM: 1051
DATE:20/03/75

H-Alpha Flares
49.19
20.25
ronomical Institute
1943 to present
ular
304 cm C. Zeiss refractor, fine structure of
ive regions in H-alpha, detailed photography
e picture per 3-5 minutes)
---------- Drawings, photographic plates
film
---------- Regular
ER ------ 1 MONTHS
---------- Copies of drawings, photographic
paper

---------- Yes
ION ----- Dr. Julius Sykora
Astronomical Inst Skalnate Pleso
of the Slovak Academy of Sciences
Tatranska Lomnica
Czechoslovakia 05960

-------- Same as above

ITEM: 1112
DATE:15/05/75

H-Alpha Flares
35.70
51.47
D, 2 Weather Wing
1968 to present
ular

ADDITIONAL COMMENTS -----

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TEHRAN

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ITEM: 1112
DATE:15/05/75

DISCIPLINE ----------	C01 H-Alpha Flares
STATION LATITUDE ----------	N 35.70
STATION LONGITUDE ----------	E 51.47
ALTERNATE NAMES ----------	OL-D, 2 Weather Wing
DATES OF OPERATION ----------	12/1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow W-120 Optical Telescope (H-alpha); observatory operates daily from sunrise to sunset, takes 35 mm photos of the solar disk at a rate of 1 frame/min; monitors high frequency receivers for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 2 Weather Wing APO Box 1500 New York USA 09205
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above

ADDITIONAL COMMENTS -----

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253

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C01 H-Alp

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TEL AVIV
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ITEM: 597
DATE:01/08/75

DISCIPLINE ---------- C01 H-alpha Flares
STATION LATITUDE ---------- N 32.10
STATION LONGITUDE ---------- E 34.50
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Carroll span. H-alpha patrol. Medium resolution patrol, partial disk coverage, 15 s interval 0700-1500 daily.
RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- H. Zirin
California Inst of Technology, 354-33
1201 E. California Blvd.
Pasadena CA
USA 91125

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Physical location of Carrol span: Tel Aviv- Solar Telescope, Wise Observatory, Tel Aviv University, Ramat Aviv, Tel Aviv, Israel

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TOKYO
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ITEM: 1060
DATE:14/04/75

Alpha Flares (Cont.)

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UCCLE
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ITEM: 643
DATE:12/02/76

DISCIPLINE	C01 H-Alpha Flares
STATION LATITUDE	N 50.80
STATION LONGITUDE	E 4.35
ALTERNATE NAMES	
DATES OF OPERATION	01/1954 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Lyot filter no. 11 on Equatorial solar table, H-Alpha Cinema Flare Patrol, Obj OPL 140 mm, F 1140 mm, diaphragm 110 mm; filter is directly in convergent beam. Before the camera robot-36ME is a magnifying objective Saptir-Boyer of 150 mm foc. Focal image: 18 mm; if solar activity is poor 1 image/2.5 min, if the sun is active 1 image/30 s. Kodak SO 392, Estar base, D76, 7 min.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	OBSERVATIONS CHROMOSPHERIQUES 1-B + Communications de lObs. Royal d Belgique, + Bulletin Astronomique Observ. Royal de Belgique
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. Koeckelenbergh Observatoire Royal de Belgique, D Avenue Circulaire No. 3 Bruxelles Belgium B1180
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	There is a gap of 3 years data (1972-1975). A flar spectrograph is planned for 1976-1977. Special pur pose data available after 1 month.

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TOKYO
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ITEM: 1060
DATE:14/04/75

DISCIPLINE ---------- C01 H-Alpha Flares
STATION LATITUDE ---------- N 35.67
STATION LONGITUDE ---------- E 139.54
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1949 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Monochromatic Heliograph, continuous photographing of the sun in the H-alpha light
RAW DATA ---------- Film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- MONTHLY BULLETIN ON SOLAR PHENOMENA, Tokyo Astronomical Obs
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Meudon
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Fumio Moriyama
Tokyo Astronomical Observatory
Osawa 2-21-1
Mitaka Tokyo
Japan 181

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Auxiliary equipment: H-alpha line profile recorder.

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254

C01 H-Alp

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UECHT

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ITEM: 1067
DATE:10/04/75 96

DISCIPLINE ----------	C01 H-Alpha Flares
STATION LATITUDE ----------	N 46.85
STATION LONGITUDE ----------	E 7.27
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	05/1970 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Cl-8 inch Coude Refractor, bifringent filter centered on H-alpha, 0.5A bandwidth, f 2.35 m, records on 35 mm film, pictures taken automatically every 2 min, during flares every 20 s.
RAW DATA ----------	Film
DATA REDUCTION PRACTICE ----------	Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Film
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Mr. F. Stocker, Uecht Observatory Institute of Applied Physics Sidlerstr. 5 Bern Switzerland CH-3000
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

H-Alpha Flares (Cont.)

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UPICE
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ITEM: 797
DATE: 00/00/75

DISCIPLINE ----------	C01 H-alpha Flares
STATION LATITUDE ----------	N 50.30
STATION LONGITUDE ----------	E 16.01
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	H-alpha/Spectroheliograph at 6563A
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. L. Krivsky Astronomical Institute Ondrejov Czechoslovakia 25165
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

255

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C02 Solar Lo

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BIG BEAR
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ITEM: 59
DATE:14/07/75 1a

DISCIPLINE ---------- C02 Solar Local Magnetic Fields
STATION LATITUDE ---------- N 34.16
STATION LONGITUDE ---------- E 243.49
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 10 inch (25 cm) vacuum refractor, high resolution patrol, multiple wavelengths, magnetic fields,
RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- H. Zirin
California Inst. of Technology, 354-33
1201 E. California Blvd.
Pasadena CA
USA 91125

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- 1400-0100 UT.

****
BOULDER
****

ITEM: 930
DATE:13/02/75 1b

DISCIPLINE ---------- C02 Solar Local Magnetic Fields
STATION LATITUDE ---------- N 39.98

C02 Solar Local Magnetic Fields

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TEM: 59
ATE:14/07/75 1a

r, high resolution
agnetic fields,

of Technology, 354-33
ia Blvd.
A
91125

TEM: 930
ATE:18/02/75 1b

eyepiece, TV mon-
et patrol.

****
KITT PEAK
****

DISCIPLINE ----------	C02 Solar Local Magnetic Fiel
STATION LATITUDE ----------	N 31.96
STATION LONGITUDE ----------	E 248.40
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	02/1970 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Solar photospheric magnetogra Babcock type magnetograph, 1 Fe 8688A. Observations are m CRT gives immediate record wh to SEL Forecast Center (Bould
RAW DATA ----------	Film, magnetic printouts
DATA REDUCTION PRACTICE ----------	Regular ,
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONT
FORM OF REDUCED DATA ----------	Film (fixed pa magnetic tape,
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	W. Livingston Kitt Peak Nati P.O. Box 26732 Tucson USA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Co-investigator: J. Harvey (same purpose data available immediate were made monthly from 02/1970, 04/1973.

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ITEM: 980
DATE:14/03/75

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---- C02 Solar Local Magnetic Fields
---- N 31.96
---- E 248.40

---- 02/1970 to present
Intermittent operation
---- Regular
---- Solar photospheric magnetograms, 512-channel Babcock type magnetograph, 1 arcsec pixel, in Fe 8688A. Observations are made daily. On-line CRT gives immediate record which is transmitted to SEL Forecast Center (Boulder, CO) by phone.
---------- Film, magnetic tape, computer printouts
---------- Regular , None
ILABLE AFTER ------ 1 MONTHS
---------- Film (fixed pattern noise removed) magnetic tape, etc.

---------- Yes

T ---------- Yes
ABOUT STATION ----- W. Livingston
Kitt Peak National Observatory
P.O. Box 26732
Tucson AZ
USA 85726

ABOUT DATA -------- Same as above
- Co-investigator: J. Harvey (same address). Special purpose data available immediately. Observations were made monthly from 02/1970, made daily from 04/1973.

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- 1400-0100 UT.

****
BOULDER
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ITEM: 930
DATE:18/02/75

DISCIPLINE ---------- C02 Solar Local Magnetic Fields
STATION LATITUDE ---------- N 39.98
STATION LONGITUDE ---------- E 254.72
ALTERNATE NAMES ---------- Boulder Observatory
SOLTERWARN
DATES OF OPERATION ---------- 05/1967 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ H-alpha Telescope (Razdow 120), eyepiece, TV monitor, 35 mm film, sunrise to sunset patrol. Daily photos and flare reports in real time to Forecast Center and IUWDS Network.

RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- 35 mm film
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Space Environment Services Center
Space Environment Lab, ERL, NOAA
325 Broadway
Boulder CO
USA 80302

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Part of the US National Operational Flare Patrol Network. Data are available in real time to other Regional Warning Centers.

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C02 Solar Local Magnetic Fields (Cont.)

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POTSDAM
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ITEM: 1140
DATE:22/08/76

DISCIPLINE ----------	C02 Solar Local Magnetic Fields
STATION LATITUDE ----------	N 52.38
STATION LONGITUDE ----------	E 13.07
ALTERNATE NAMES ----------	Sonnenobs. Einsteinturm
DATES OF OPERATION ----------	1965 to present
OBSERVING SCHEDULE ----------	Occasional
INSTRUMENT DESCRIPTION -----	Solar tower telescope (f=1400cm, d=60cm) with grating spectrograph (f=1200cm, grating 15x15 cm-sq), containing vector magnetograph for Fel 5253A, device for photographic Zeeman spectrograms.
RAW DATA ----------	Film, analog paper records, computer printouts, drawings
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	6 MONTHS
FORM OF REDUCED DATA ----------	Tables, maps, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. Dr. F. W. Jager Zentralinst fur solar-terrestrische Phy Telegrafenberg Potsdam German Dem Rep DDR-15
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available after 6 months.

1 257

C03 Solar Radio Eve

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AHMEDABAD
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ITEM: 732
DATE:00/00/75

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- N 23.01
STATION LONGITUDE ---------- E 72.60
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Total solar radio flux, 2800 MHz
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER -------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------

Prof. Ram Gopal Rastogi
Physical Research Laboratory
Navrangpura
Ahmedabad Gujarat
India 380009

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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ITEM: 1084
DATE:23/08/75

2

C03 Solar Radio Events, Fixed Frequency

ITEM: 732
DATE:00/00/75

Fixed Frequency

2800 MHz

MONTHS

m Gopal Rastogi
Research Laboratory
ura
d Gujarat
380009

above

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ATHENS
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DISCIPLINE ----------	C03 Solar Radio Events
STATION LATITUDE ----------	N 37.85
STATION LONGITUDE ----------	E 23.72
ALTERNATE NAMES ----------	OL-C, 2 Weather Wing
DATES OF OPERATION ----------	12/1965 to present Station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-250 Optical Radio Telescopes, AFGL operates from sunrise four discrete radio fr 4995, and 8800 MHz): t disk at a rate of 1 fr frequency receivers fo tors total electron co
RAW DATA ----------	Film, s
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30
FORM OF REDUCED DATA ----------	Logs, c
DATA ROUTINELY PUBLISHED ----------	SOLAR-G
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-C, 2 APO New Yor USA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as
ADDITIONAL COMMENTS -----	Data are at the National The observatory moved fro the Acropolis) to Pendeli old site) in May 1973.

ITEM: 1084
DATE:23/08/75

Fixed Frequency

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ITEM: 1151
DATE:15/05/75

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------ C03 Solar Radio Events, Fixed Frequency
------ N 37.85
------ E 23.72
------ OL-C, 2 Weather Wing
------ 12/1965 to present
Station moved
------ Regular
----- Razdow WS-250 Optical Telescope (H-alpha); AFGL Radio Telescopes, AFGL Polarimeter; observatory operates from sunrise to sunset daily, monitors four discrete radio frequencies (1415, 2695, 4995, and 8800 MHz); takes photos of the solar disk at a rate of 1 frame/min; monitors five high frequency receivers for detection of SWFs; monitors total electron content.
---------- Film, strip charts, drawings
---------- Regular
VAILABLE AFTER ------ 1/30 MONTHS
---------- Logs, chart rolls
D ---------- SOLAR-GEOPHYSICAL DATA (NOAA)

ST ----------
ABOUT STATION ----- OL-C, 2 Weather Wing
APO
New York NY
USA 09223

ABOUT DATA -------- Same as above
--- Data are at the National Observatory of Athens. The observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

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ITEM: 1078
DATE:19/01/76

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ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS -------

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ITEM: 1084
ARCETRI
DATE:23/08/75
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DISCIPLINE ----------	C03 Solar Radio Events, Fixed Frequency	
STATION LATITUDE ----------	N	43.75
STATION LONGITUDE ----------	E	11.25
ALTERNATE NAMES ----------		
DATES OF OPERATION ----------	Intermittent operation	
OBSERVING SCHEDULE ----------	Regular	
INSTRUMENT DESCRIPTION -----	Solar Radio Phenomena at 9240, 2830, 1420 MHz	
RAW DATA ----------	Strip chart	
DATA REDUCTION PRACTICE ----------	Regular	
REGULAR REDUCED DATA AVAILABLE AFTER ------	1	MONTHS
FORM OF REDUCED DATA ----------	Tables, computer printouts	
DATA ROUTINELY PUBLISHED ----------		
DATA SENT TO WDC-A ----------	Yes	
DATA SENT TO WDC-B ----------	Yes	
DATA SENT TO WDC-C ----------		
DATA AVAILABLE ON REQUEST ----------	Yes	

ADDRESS FOR INFORMATION ABOUT STATION -----
Giuseppe Tagliaferri
Osservatorio Astrofisico di Arcetri
Largo E. Fermi, 5
Firenze
Italy 50125

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

4

New York NY
USA 09223

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data are at the National Observatory of Athens. The observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

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ITEM: 1078
DATE:19/01/76

ATIBAIA, ITAPETINGA

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DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- S 23.50
STATION LONGITUDE ---------- E 313.50
ALTERNATE NAMES ---------- Sao Paulo
DATES OF OPERATION --------- 1966 to present
Station moved
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- 7 GHz Solar Polarimeter, solar activity at microwaves
RAW DATA ---------- Strip chart, analog magnetic tape, tables
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, plots
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- P. Kaufmann
Universidade Mackenzie - CRAAM
R. Itambe 135
Sao Paulo SP
Brazil 01239

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Station moved from Umuarama to Atibaia in 1970.

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258

C03 Solar Radio Event

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BOULDER
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ITEM: 919
DATE:18/03/75

DISCIPLINE	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE	N 40.10
STATION LONGITUDE	E 254.75
ALTERNATE NAMES	Boulder Radio Observatory SOLTERWARN
DATES OF OPERATION	10/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Airbourne Instrument Radio Telescope, discrete frequencies (1415, 2695, 4995 MHz)(and 245, 606 MHz since 1971), sunrise to sunset patrol. Scheduled and burst reports in flux units to Forecast Center and IUWDS Network.
RAW DATA	Strip charts, coded reports
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip charts, coded reports
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Space Environment Services Center Space Environment Lab, ERL, NOAA 325 Broadway Boulder CO USA 80302
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of the National Solar Flare Patrol. Data are available in real time to other Regional Warning Centers. Equipment formerly at JSC, NASA, Houston, Texas USA.

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BUENOS AIRES

ITEM: 827

ents, Fixed Frequency (Cont.)

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CHUBU
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ITEM: 964
DATE:03/03/75

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- N 35.27
STATION LONGITUDE ---------- E 137.01
ALTERNATE NAMES ----------

Kasugai
DATES OF OPERATION ---------- 01/1967 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- VLF stations: NWC 22.3 kHz, GBR 16 kHz, continuously.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. Dr. Atsushi Kimpara
Chubu Institute of Technology
1200 Matsumoto-cho
Kasugai-shi Aichi-ken, 487
Japan

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 2 months.

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ------ Part of the National Solar Flare Patrol. Data are available in real time to other Regional Warning Centers. Equipment formerly at JSC, NASA, Houston, Texas USA.

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BUENOS AIRES
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ITEM: 327
DATE:00/00/75

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- S 34.55
STATION LONGITUDE ---------- E 301.27
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1967 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Solar Radio Bursts at 3 cm
RAW DATA ---------- Pen and ink strip charts
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Strip charts, bulletins
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Mr. J. R. Seibold
Dept de Fisica Solar, Obs Nac de Fis
Av. Mitre 3100
San Miguel
Argentina

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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1 259

C03 Solar Radio Events

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CULGOORA
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ITEM: 130
DATE:11/03/75

DISCIPLINE	CØ3 Solar Radio Events, Fixed Frequency
STATION LATITUDE	S 30.32
STATION LONGITUDE	E 149.57
ALTERNATE NAMES	CSIRO Solar Observatory
DATES OF OPERATION	Ø9/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Radioheliograph with radiospectrograph, radio source positions and polarizations of solar activity. Heliograph: One 2-D picture of sun each second between approx. 2300 and 0500 UT at one of these frequencies: 80, 160 MHz in LH and RH circ. pol., or unpol. 43 MHz. Additional frequency 327 MHz planned to go into operation late 1976.
RAW DATA	Magnetic tape
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, computer maps
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA, (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Toyokawa
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Mr. W. J. Payten CSIRO Solar Observatory P. O. Box 94 Narrabri N.S.W. Australia 2390
ADDRESS FOR INFORMATION ABOUT DATA	Dr. S. F. Smerd CSIRO Division of Radiophysics P.O. Box 76 Epping N.S.W. Australia 2121
ADDITIONAL COMMENTS	Special purpose observations are usually available after several months. Participate on request in STP studies, ATM-Skylab, Apollo and similar space experiments.

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) Solar Radio Events, Fixed Frequency (Cont.)

ITEM: 130
DATE:11/03/75

Fixed Frequency

iospectrograph,
nd polarizations of
aph: One 2-D picture of
approx. 2300 and 0500 UT
ies: 80, 160 MHz in LH
pol. 43 MHz. Additional
d to go into operation

tape
, Special
MONTHS
omputer maps
PHYSICAL DATA, (NOAA)

Payten
ar Observatory
94
N.S.W.
2390

Smerd
sion of Radiophysics
76
N.S.W.
2121
are usually available
cipate on request in
llo and similar space

****
DURNTEN
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DISCIPLINE	C03 Solar Radio Events,
STATION LATITUDE	N 47.38
STATION LONGITUDE	E 8.85
ALTERNATE NAMES	Zurich
DATES OF OPERATION	12/1974 to present Intermittent operation
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Digitized solar radio s programmed frequencies Computer tunable receiv with 1 MHz bandwidth. quiet sun, observing in cal developments, frequ changed and sometimes c thus allowing high time
RAW DATA	IBM comp
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1
FORM OF REDUCED DATA	Lists, p
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Radio As Gloriast Zurich Switzerl
ADDRESS FOR INFORMATION ABOUT DATA	Same as
ADDITIONAL COMMENTS	Data available as: lists o quency profiles, isodensit on tape and digital film r

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(Cont.)

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ITEM: 158
DATE:08/07/75

---------- C03 Solar Radio Events, Fixed Frequency
---------- N 47.38
---------- E 8.85
---------- Zurich
--------- 12/1974 to present
Intermittent operation
--------- Occasional
PTION ----- Digitized solar radio spectrograms of events at programmed frequencies between 100 and 1000 MHz. Computer tunable receiver, 2000 measurements/s with 1 MHz bandwidth. Sensitivity: 0.1 dB above quiet sun, observing intermittent due to technical developments, frequency programs are often changed and sometimes cover only a narrow band thus allowing high time resolution.

---------- IBM compatible magnetic tape
ACTICE ---------- Regular
ATA AVAILABLE AFTER ------ 1 MONTHS
ATA ---------- Lists, profiles, plots, tape, film
BLISHED ----------
A ----------
B ----------
C ----------
REQUEST ---------- Yes
MATION ABOUT STATION -----

Radio Astronomy Group, Microwave Lab ETH
Gloriastrasse 35
Zurich
Switzerland 8006

MATION ABOUT DATA -------- Same as above
TS ----- Data available as: lists of events, time and frequency profiles, isodensity plots, calibrated data on tape and digital film recordings.

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260

C03 Solar Radio Event

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DWINGELOO
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ITEM: 1086
DATE:24/02/75

DISCIPLINE ----------	C)3 Solar Radio Events, Fixed Frequency
STATION LATITUDE ----------	N 52.81
STATION LONGITUDE ----------	E 6.40
ALTERNATE NAMES ----------	Solar Radio Observatory Neth. Found. Radio Astronomy
DATES OF OPERATION ---------	12/1968 to present Station moved Intermittent operation
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Multi-channel Radio Spectrograph, spectrograms of events, 60-channels, intensity and circular polarization, resolution 1 MHz, 10 ms, coverage 160-320 MHz; recording on film and during short intervals on digital magnetic tape (calibrated recording); observations scheduled according to expected solar activity.
RAW DATA ----------	Film, partly digital magnetic tape partly strip chart
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	0.5 MONTHS
FORM OF REDUCED DATA ----------	Photo prints, graphical plots
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes Toyokawa
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Radio Sterrewacht Dwingeloo Netherlands Foundation Radio Astronomy ATTN: Dr. C. Slottje Dwingeloo Netherlands
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Regular data available on film, special purpose data available on digital mag tape after 1 month. Former station location: Nera (N52.23 E05.08) until 8/1972. Gaps in operation: 8-12/1971, 8-12/1972, 12/1973-1/1974, 4-5/1974, 8-11/1974.

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HAMILTON
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ITEM: 236
DATE:14/01/76

vents, Fixed Frequency (Cont.)

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HIRAISO
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ITEM: 950
DATE: 20/03/75

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- N 36.37
STATION LONGITUDE ---------- E 140.63
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ UHF, VHF Receiver at 100, 200, 500, 9500 MHz, continuously recording (0600-1300 LT) on strip chart at 36 cm/h.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 3 MONTHS
FORM OF REDUCED DATA ---------- Table
DATA ROUTINELY PUBLISHED ---------- IONOSPHERIC DATA IN JAPAN, month issued by RRL
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
United Kingdom
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Hiraiso Branch
Radio Research Laboratories
3603 Isozaki-machi
Nakaminato-shi Ibaraki-Ken
Japan 311-12

ADDRESS FOR INFORMATION ABOUT DATA ---------- WDC C2 for Ionosphere
Radio Research Laboratories
2-1, Nukui-Kitamachi 4-chome
Koganei-shi Tokyo
Japan 184
ADDITIONAL COMMENTS ------ Special purpose data available after 1 month.

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IRKUTSK
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ITEM: 858
DATE: 00/00/75

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- N 52.47
STATION LONGITUDE ---------- E 104.03
ALTERNATE NAMES ---------- Zui
DATES OF OPERATION ---------- 12/1958 to present

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Regular data available on film, special purpose data available on digital mag tape after 1 month. Former station location: Nera (N52.23 E05.08) until 8/1972. Gaps in operation: 8-12/1971, 8-12/1972, 12/1973-1/1974, 4-5/1974, 8-11/1974.

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HAMILTON

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ITEM: 236
DATE:14/01/76

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- N 42.25
STATION LONGITUDE ---------- E 289.00
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Solar radio bursts on nine frequencies
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- John P. Castelli
AFGL - LIR
Hanscom Field
Bedford MA
USA 01731

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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2-1, Nukui-Kitamachi 4-chome
Koganei-shi Tokyo
Japan 184

ADDITIONAL COMMENTS ------ Special purpose data available after 1 month.

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IRKUTSK
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ITEM: 858
DATE:00/00/75

DISCIPLINE ----------	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ----------	N 52.47
STATION LONGITUDE ----------	E 104.03
ALTERNATE NAMES ----------	Zui
DATES OF OPERATION ----------	12/1958 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Solar Radio Bursts at 3.2 cm, daily observations
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Drawings
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. V. E. Stepanov SibIZMIR 664697 P.O.B. 4 USSR 33
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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261

C03 Solar Radio Events

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KISLOVODSK
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ITEM: 978
DATE:29/04/75

DISCIPLINE	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE	N 44.70
STATION LONGITUDE	E 42.50
ALTERNATE NAMES	
DATES OF OPERATION	06/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Radio Telescope with mirrors 2 and 3 m, interferometer
RAW DATA	Photos, tables, charts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, photos
DATA ROUTINELY PUBLISHED	SOLAR DATA (pulkovo Obs) Zurich Quarterly Solar Bulletin
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Kislovodsk Station of Pulkovo Obs P.O. Box 1 Kislovodsk USSR 357741
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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LA PAZ
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ITEM: 330
DATE:21/01/76

ıts, Fixed Frequency (Cont.)

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LA POSTA
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ITEM: 989
DATE:15/05/75

DISCIPLINE	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE	N 32.40
STATION LONGITUDE	E 243.50
ALTERNATE NAMES	OL C, 12 Weather Squadron Navy Electronic Lab Cen (NELC)
DATES OF OPERATION	10/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Solar Radio Telescope operates daily from sunrise to sunset, monitors 2 fixed frequencies 2800 and 8800 MHz.
RAW DATA	Logs, chart rolls
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Logs, chart rolls
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	OL C, 12th Weather Squadron Route 1, Box 591 Campo CA USA 92006
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data are regularly sent to NELC, San Diego.

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MANILA
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ITEM: 1000
DATE:03/06/75

DISCIPLINE	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE	N 14.64

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LA PAZ
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ITEM: 330
DATE:21/01/76

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- S 16.30
STATION LONGITUDE ---------- E 291.91
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1976 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Solar Radio/Optical Phenomena
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, punched paper tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Instituto de Investigaciones Fisicas
Laboratorio de Fisica Cosmica
Universidad Mayor de San Andres
La Paz
Bolivia

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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MANILA

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ITEM: 1000
DATE:03/06/75

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- N 14.64
STATION LONGITUDE ---------- E 121.08
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 6 Solar Radiometers for 8800, 4995, 2695, 1415, 606, and 245 MHz, sunrise to sunset observations of the Dicke type radiometer at 0.1 mm/s.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1/30 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- The Director
Manila Observatory
P.O. Box 1231
Manila
Philippines

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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262

C03 Solar Radio Events

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NANCAY
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ITEM: 433
DATE:02/02/76

DISCIPLINE	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE	N 44.40
STATION LONGITUDE	E 2.20
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Global flux: 169 MHz; 408 MHz. No accurate calibration, available for radioburst observations.
RAW DATA	Paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Monique Pick Meudon Observatory D.A.S.O.P. Meudon France 92190
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ONDREJOV

ITEM: 801
DATE:00/00/75

nts, Fixed Frequency (Cont.)

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PALEHUA
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ITEM: 1119
DATE:15/05/75

DISCIPLINE ----------	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ----------	N 21.38
STATION LONGITUDE ----------	E 201.93
ALTERNATE NAMES ----------	OL-D, 1 Weather Wing
DATES OF OPERATION ----------	10/1969 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-120 optical telescope (H-alpha), AFGL radio telescopes operate from sunrise to sunset daily. Monitors 2 discrete radio frequencies: 1415 and 8800 MHz. Take 35 mm photos of the solar disk at a rate of 1 frame/min. Monitors high frequency receivers for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 1 Weather Wing APO San Francisco USA 96553
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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PENN STATE U
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ITEM: 775
DATE:00/00/75

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ONDREJOV
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ITEM: 801
DATE:00/00/75

DISCIPLINE	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE	N 49.92
STATION LONGITUDE	E 14.98
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Total Solar Radio Flux at 37, 56 and 115 cm (260, 536 and 808 MHz)
RAW DATA	Magnetic tape
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter, microfilm
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. L. Krivsky Astronomical Institute Ondrejov Czechoslovakia 25165
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Co-investigators: Dr. V. Bumba and Mr. Antonin Tlamicha.

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San Francisco
USA 96553

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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PENN STATE U
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ITEM: 775
DATE:00/00/75

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- N 40.82
STATION LONGITUDE ---------- E 282.13
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Solar Radio Events on 406, 960, 2700, 10 700 MHz.
Also on 36 and 90 MHz.
RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Strip charts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. John P. Hagen
Dept of Astronomy, Pennsylvania State
525 Davey Laboratory
Univ Park PA
USA 16802

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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C03 Solar Radio Ev

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PENTELI
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ITEM: 908
DATE:18/03/75

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- N 38.05
STATION LONGITUDE ---------- E 23.86
ALTERNATE NAMES ---------- Athens
National Observatory of Athens

DATES OF OPERATION ---------- 08/1970 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ------ Radio Telescope on fixed frequencies 1445, 2695, 5005, 8800 MHz with a 90 inch antenna.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 0.5 MONTHS
FORM OF REDUCED DATA ---------- Tables, films, photographic paper
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Meudon, France
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Astronomical Institute
National Observatory of Athens
Athens
Greece 306

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data available after 0.5 months.

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ROME

ITEM: 746
DATE:00/00/75

Events, Fixed Frequency (Cont.)

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SAGAMORE HILL
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ITEM: 1160
DATE:27/06/75

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- N 42.63
STATION LONGITUDE ---------- E 289.18
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1966 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Solar Radio Telescope, total flux and bursts at 245,410,606,1415,2695,4995,8800,15400,35000MHz; sunrise to sunset patrol, Dicke radiometer, mult channel recorders, 1/2inch/min and 6mm/min, antennas: parabola solar tracker, 28ft diameter/ single sideband for 245,410,606,1415MHz, 8ft diameter/dual sideband for 2695,4995,8800MHz, 3f diameter/dual sideband for 15.4GHz, 18inch diameter for 35GHz. Make noon flux measurements on all but 35GHz.

RAW DATA ---------- Analog strip charts, charts, drawings, digital data since 1975

DATA REDUCTION PRACTICE ---------- Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, graphical plots, computer printout, punched cards

DATA ROUTINELY PUBLISHED ---------- AFGL in-house, SOLAR-GEOPHYSICAL DATA (NOAA), IAU Quarterly (QBSA)

DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Mr. John P. Castelli
AFGL (LJR)
L. G. Hanscom Field
Bedford MA
USA 01730

ADDRESS FOR INFORMATION ABOUT DATA -------- Mr. William Barron
AFGL (LJR)
L. G. Hanscom Field
Bedford MA
USA 01730

ADDITIONAL COMMENTS ----- Dates of start of monitoring: 245MHz(7/1969), 410MH (9/1971), 606MHz(1/1966), 1415MHz(1/1966), 2695MHz (1/1966), 4995MHz(4/1966), 8800MHz(1/1966),15.4GHz (1/1968) 35GHz(1/1969). Sag Hill Solar Radio Observatory is the key station of the USAF AWS Solar Radio Network of 4 stations of the Space Environmenta Support System. Data are used in calibrations, warnings of geophysically important events, in-hous research. Special purpose data available immediately.

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ROME
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ITEM: 746
DATE:00/00/75

DISCIPLINE ---------- C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ---------- N 41.90
STATION LONGITUDE ---------- E 12.50
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Solar Radio Phenomena
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Bulletins
DATA ROUTINELY PUBLISHED ---------- SOLAR PHENOMENA, PHOTOGRAPHIC JOURNAL OF THE SUN (monthly)
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Massimo Cimino
Observatorio Astronomico di Roma
Via del Parco Mellini, 84
Rome
Italy 00136

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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264

C03 Solar Radio Events

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SLOUGH
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ITEM: 559
DATE:23/06/75

DISCIPLINE	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE	N 51.49
STATION LONGITUDE	E 359.44
ALTERNATE NAMES	
DATES OF OPERATION	07/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Solar Millimetre Wave Radiometers. Solar Flares at mm Wavelengths. Solar radiometers covering frequency range 9.4-71 GHz (32-4 mm). Normal chart speed 10 cm/h. Major bursts are digitized at rate of about 1 data point per 2 s. Radiometer time constant 1-3 s.
RAW DATA	Charts, plus digital on paper tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Table of events
DATA ROUTINELY PUBLISHED	Solar Millimetre Data Bulletin
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
	Utrecht, Tokyo
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. D. L. Croom Appleton Laboratory Ditton Park Slough Bucks United Kingdom SL39JX
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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r Radio Events, Fixed Frequency (Cont.)

3M: 559
TE:23/06/75

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eters covering
mm). Normal
ts are digitized
r 2 s. Radio-

tal on paper tape

Data Bulletin

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SL39JX

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TORUN
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DISCIPLINE ----------	C03 Solar Radio Events, Fixed F
STATION LATITUDE ----------	N 53.10
STATION LONGITUDE ----------	E 18.55
ALTERNATE NAMES ----------	Nicolaus Copernicus University Piwnice Astronomical Obs
DATES OF OPERATION ----------	10/1958 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Simple Interferometer, total fl 127 MHz; the interferometer con placed 23.6 m (10 wavelengths) direction. The sine wave patte in a Dicke radiometer of 230 kH 2 s LF time constant. Recorder speed 16 cm/h. Data reduced ma the daily mean fluxes which are minicomputer.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	QBSA data of dai since 10/1958; S DATA (NOAA) compl outstanding occu 1/1975
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes Toyokawa
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Kazimierz Borkow Inst of Astronom Chopina 12/18 Torun Poland
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	127 MHz observations for 10/1958-1 parabolic (12 m dish) antenna. In observations carried out since 9/1 observations (longer than or equal 2-8/1960, 7/1972, 1-5/1973, 7/1974 12/1973 are not yet reduced.

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ITEM: 1090
DATE:12/11/76 76

C03 Solar Radio Events, Fixed Frequency
N 53.10
E 18.55
Nicolaus Copernicus University
Piwnice Astronomical Obs
10/1958 to present
Intermittent operation
Regular
Simple Interferometer, total flux observations at 127 MHz; the interferometer consists of 2 antennas placed 23.6 m (10 wavelengths) apart along E-W direction. The sine wave pattern signal is detected in a Dicke radiometer of 230 kHz IF bandwidth and 2 s LF time constant. Recorder, s tape (paper) speed 16 cm/h. Data reduced manually except the daily mean fluxes which are calculated with a minicomputer.

---------- Strip chart
---------- Regular
E AFTER ------ 1 MONTHS
---------- Tables
---------- QBSA data of daily mean fluxes since 10/1958; SOLAR-GEOPHYSrCAL DATA (NOAA) complete data of outstanding occurrences since 1/1975
---------- Yes
---------- Yes
---------- Yes
Toyokawa
---------- Yes
STATION ----- Kazimierz Borkowski
Inst of Astronomy, Nicolaus Copernicus U
Chopina 12/18
Torun
Poland PL 87-100

DATA -------- Same as above
27 MHz observations for 10/1958-1/1960 made with rabolic (12 m dish) antenna. Interferometric servations carried out since 9/1960. Gaps in servations (longer than or equal to 1 month): 8/1960, 7/1972, 1-5/1973, 7/1974. Records for /1973 are not yet reduced.

265

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C03 Solar Radio E

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TREMSDORF
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ITEM: 1064
DATE:11/08/75

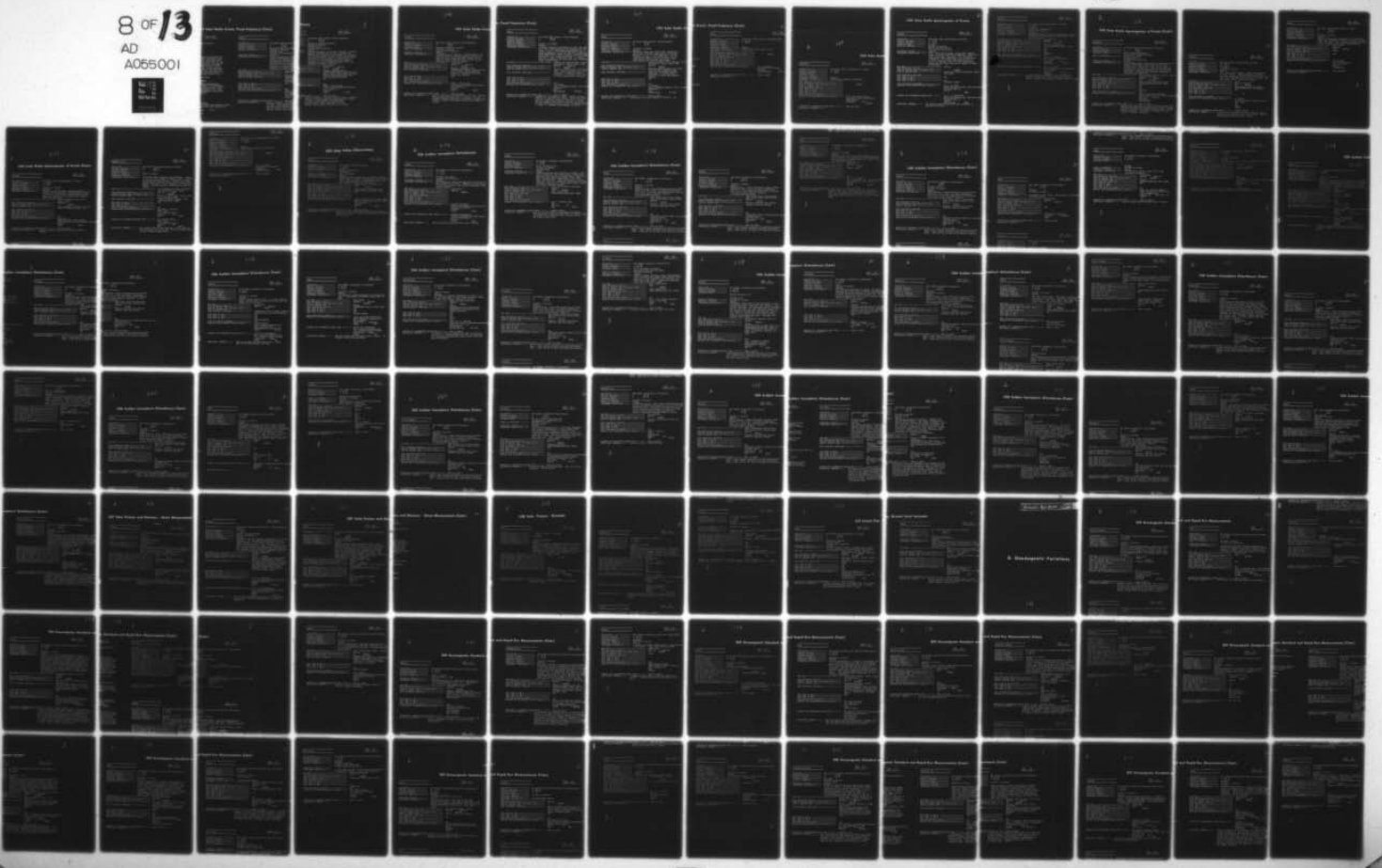
DISCIPLINE	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE	N 52.28
STATION LONGITUDE	E 13.13
ALTERNATE NAMES	
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Radiometer and Radiopolarimeter, measurement of intensity and polarization of total solar radio flux at different frequencies; observing time 0800-1400 UT during winter and 0700-1500 UT during summer. Absolutely calibrated measurements at 9400, 3000, 1500 MHz. Radiometers at 9400, 3000, 1500, 287, 510, 234, 64, 15 MHz; polarimeters at 9400, 1500, 775, 40, 23 MHz (circular polarization) and 113 and 30 MHz (circular and linear polarization). Time resolution about 3 s at 9400, 3000, 1500 MHz and less than 0.1 s at the other frequencies.
RAW DATA	Paper records, film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Several lists
DATA ROUTINELY PUBLISHED	SOLARE BEOBACHTUNGSERGEBNISSE (Solar Data) Akad. d. Wissenschaften d. DDR, Zentralinst f. solar-terrestrische Physik (HHI), DDR-1199 Berlin-Adlershof, Tables are published monthly
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
	Toyokawa
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Annelies Bohme Zentralinst f solar-terrestrische Pl Telegrafenberg Haus A50, Bereich C1 Potsdam German Dem Rep DDR-15
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

UNCLASSIFIED AFGL-TR-77-0255 NL

8 OF 13
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)3 Solar Radio Events, Fixed Frequency (Cont.)

ITEM: 1064
DATE:11/08/75 7c

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meter, measurement of
of total solar radio
ies; observing time
and 0700-1500 UT dur-
libration measurements
adiometers at 9400,
64, 15 MHz; polari-
40, 23 MHz (circular
30 MHz (circular and
e resolution about 3 s
d less than 0.1 s at

ds, film

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ts
ACHTUNGSERGEBNISSE
) Akad. d. Wissenschaf-
Zentralinst f. solar-
he Physik (HHI), DDR-
-Adlershof, Tables are
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s Bohme
f solar-terrestrische Physik
erg Haus A50, Bereich C1

Rep DDR-15

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TRIESTE
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DISCIPLINE ----------	C03 Solar Radio Events,
STATION LATITUDE ----------	N 45.64
STATION LONGITUDE ----------	E 13.88
ALTERNATE NAMES ----------	Basovizza Observing Stat
DATES OF OPERATION ----------	03/1966 to present Station moved Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Radio Polarimeter at 237 handed) polarization of antenna is a parabolic d Sum and difference of th ized signal are recorded 20 cm/h. R- and L-hande separately on analog mag response is better than
RAW DATA ----------	Strip cha
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3
FORM OF REDUCED DATA ----------	Tables, c
DATA ROUTINELY PUBLISHED ----------	OSSERVAZI letin, hc density a also dist
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Radio - S Trieste A G.B. Tiep Trieste Italy
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as a
ADDITIONAL COMMENTS -----	Gaps in operation: 11/1962; 5-8/1973. Only radiometric 12/1969; 4/1972-6/1972; 1/1 Station moved 3/1967 from T Special purpose data availa

(Cont.)

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ITEM: 1065
DATE:28/05/75

------ C03 Solar Radio Events, Fixed Frequency
------ N 45.64
------ E 13.88
------ Basovizza Observing Station
------ 03/1966 to present
Station moved
Intermittent operation
------ Regular
----- Radio Polarimeter at 237 MHz, circular (R- and L-handed) polarization of solar activity; the antenna is a parabolic disk having 10 m diameter. Sum and difference of the R- and L-handed polarized signal are recorded on a paper strip at 20 cm/h. R- and L-handed output recorded separately on analog magnetic tape - the time response is better than 0.01 s.

---------- Strip chart
E ---------- Regular , Special
VAILABLE AFTER ------ 3 MONTHS
---------- Tables, computer plots
ED ---------- OSSERVAZIONI SOLARI quarterly bulletin, hourly mean values of flux density and polarization data, also distinctive events
---------- Yes

EST ---------- Yes
N ABOUT STATION ----- Radio - Solar Group
Trieste Astronomical Observatory
G.B. Tiepolo 11
Trieste
Italy I 34131

N ABOUT DATA -------- Same as above
--- Gaps in operation: 11/1962; 2/1972; 3/1972; 12/1972; 5-8/1973. Only radiometric measurements: 3/1966-12/1969; 4/1972-6/1972; 1/1973-4/1974.
Station moved 3/1967 from N45.76 E13.95.
Special purpose data available in 3 months.

C03 Solar Radio Event

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TRIESTE
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ITEM: 1066
DATE:28/05/75

DISCIPLINE	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE	N 45.64
STATION LONGITUDE	E 13.88
ALTERNATE NAMES	Basovizza Observing Station
DATES OF OPERATION	01/1971 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Interferometer at 408 MHz, interferometric and radiometric data during a period of about 2 h near the local solar meridian transit; chart speed 72 cm/h; resolving power 17 min for the background and 1 min for bursts.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	OSSERVAZIONI SOLARI quarterly bulletin, daily interferometric position, visibility function, total flux density
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Radio - Solar Group Trieste Astronomical Observatory G.B. Tiepolo 11 Trieste Italy I 34131
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Gaps in operation: 11/1971-3/1972; 10/1974. Special purpose data available after 3 months. We also measured sunspot position, type and Wolf number from 1/1966 to 9/1970 and sunspot areas from 1/1969 to 9/1970.

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UECHT
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ITEM: 646
DATE:17/04/75

DISCIPLINE ----------	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ----------	N 46.85
STATION LONGITUDE ----------	E 7.27
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	05/1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	4 Stokes parameter Polarimeter at f=8.9 GHz and f=8.4 GHz, observation of the integral sun, Antenna = 1.8 m. Simultaneous measurement of 4 Stokes parameters at f=8.92 GHz with 3 simultaneous bandwidths: 4 MHz, 0.4 MHz, 0.04 MHz, and measurement of 4 Stokes parameters at f=8.40 GHz with BW = 4 MHz, integration time = 1 second, record on magnetic tape and paper tape (5mm/min) since October 1974.
RAW DATA ----------	Digital mag tape 800 bpi, 15 bit resolution, linear, paper tape
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER -------	3 MONTHS
FORM OF REDUCED DATA ----------	Computer printout with main burst char., plot of bursts, mag tape
DATA ROUTINELY PUBLISHED ----------	Institute of Applied Physics, Sidlerstr. 5, CH-3012 Bern, Div. of Solar Observations, Reports
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	C. Matzler Inst of Applied Physics, Univ of B Sidlerstr. 5 Bern Switzerland CH-3012
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	Description in Magun, A., and C. Matzler, SOLAR PHYSICS 30, page 489-496 (1973). Since Aug. 1974 data are regularly reduced if the sun is active. Special purpose data available before Aug. 1974. 8.4 GHz monitored since Dec. 1972. Co-investigators: H. Wiehl, E. Schanda (same address as above).

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C03 Solar Radio Ev

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UECHT
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ITEM: 647
DATE:10/04/75

DISCIPLINE	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE	N 46.85
STATION LONGITUDE	E 7.27
ALTERNATE NAMES	
DATES OF OPERATION	12/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Microwave broad band (10-11 GHz) radiometer, Dicke type, integral observation of the sun, Antenna = 1.6 m, f = 10.5 GHz, BW = 1.0 GHz, integration time = time resolution = 10 ms. recorded on magnetic tape (9 track), paper tape record with 30 cm/h chart speed
RAW DATA	Digital magnetic tape, 800 bpi, 15 bit resolution, linear, paper tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Computer printout-main burst char. plot of burst, magnetic tape
DATA ROUTINELY PUBLISHED	Institute of Applied Physics, Sidlerstr. 5, CH-3012 Bern, Division of Solar Observations, Reports
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	C. Matzler Inst of Applied Physics, Univ. of Bern Sidlerstr. 5 Bern Switzerland Ch-3012
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Description in Solar Physics 15 (1970) p. 253.

io Events, Fixed Frequency (Cont.)

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UPICE
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ITEM: 796
DATE:00/00/75

DISCIPLINE ----------	C03 Solar Radio Events, Fixed Frequency
STATION LATITUDE ----------	N 50.30
STATION LONGITUDE ----------	E 16.01
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Total Solar Radio Flux at 56 cm
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. L. Krivsky Astronomical Institute Ondrejov Czechoslovakia 25165
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS -----	

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268

C04 Solar Radio

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AHMEDABAD
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ITEM: 731
DATE:00/00/75 1a

DISCIPLINE ---------- C04 Solar Radio Spectrograms of Events
STATION LATITUDE ---------- N 23.01
STATION LONGITUDE ---------- E 72.60
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Solar radio spectra, 40-240 MHz
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Ram Gopal Rastogi
Physical Research Laboratory
Navrangpura
Ahmedabad India
380009

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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C04 Solar Radio Spectrograms of Events

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DURNTEN
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ITEM: 159
DATE:08/07/75

DISCIPLINE	C04 Solar Radio Spectrograms of Events
STATION LATITUDE	N 47.28
STATION LONGITUDE	E 8.85
ALTERNATE NAMES	Zurich
DATES OF OPERATION	08/1972 to present 05/1974 station moved from Zurich to new site.
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Solar radio spectrograph, solar radio spectrograms of events from 100 to 1000 MHz. Swept frequency receiver, sweep rate 4 Hz; frequency resolution 1 MHz; recording on 35 mm film with a speed of 1.25 cm/min; best sensitivity 70 s.f.u. at 300 MHz, less at other frequencies. Observing from local sunrise to sunset all days of the week.
RAW DATA	Regular
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	35mm film, list of observing times and events
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Toyokawa, Japan
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. O. Benz Radio Astronomy Group, Microwave Lab E Gloriastrasse 35 Zurich 8006
ADDRESS FOR INFORMATION ABOUT DATA	Dr. G. L. Tarnstrom Radio Astronomy Group, Microwave Lab E Gloriastrasse 35 Zurich Switzerland 8006
ADDITIONAL COMMENTS	The station moved from Zurich (N47.38 E8.50) to Durnten on 05/1974.

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CULGOORA
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ITEM: 936
DATE:11/03/75

DISCIPLINE	C04 Solar Radio Spectrograms of Events
STATION LATITUDE	S 30.32
STATION LONGITUDE	E 149.57
ALTERNATE NAMES	CSIRO Solar Observatory
DATES OF OPERATION	01/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Radiospectrograph, dynamic radio spectra 8 MHz to 8 GHz at approximately 2100-0800 UT, film speed 1 cm/min.
RAW DATA	Film (70 mm)
DATA REDUCTION PRACTICE	Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, photo prints
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Toyokawa
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Mr. W. J. Payten CSIRO Solar Observatory P.O. Box 94 Narrabri N.S.W. Australia 2390
ADDRESS FOR INFORMATION ABOUT DATA	Dr. S. F. Smerd CSIRO Division of Radiophysics P.O. Box 76 Epping N.S.W. Australia 2121
ADDITIONAL COMMENTS	We participate on request in STP studies, ATM-Skylab, Apollo and similar space experiments. Special purpose data available after several months.

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269

C04 Solar Radio Spectrograms of Events (Cont.)

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DWINGELOO
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ITEM: 1087
DATE:24/02/75

DISCIPLINE	C04 Solar Radio Spectrograms of Events
STATION LATITUDE	N 52.81
STATION LONGITUDE	E 6.40
ALTERNATE NAMES	Solar Radio Observatory Neth. Found. Radio Astronomy
DATES OF OPERATION	12/1968 to present Station moved Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Multi-channel Radio Spectrograph, spectrograms of events, 60-channels, intensity and circular polarization, resolution 1 MHz, 10 ms, coverage 160-320 MHz; recording on film and during short intervals on digital magnetic tape (calibrated recording); observations scheduled according to expected solar activity.
RAW DATA	Film, partly digital magnetic tape partly strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Photo prints, graphical plots
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Toyokawa
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Radio Sterrewacht Dwingeloo Netherlands Found. for Radio Astronomy ATTN: Dr. C. Slottje Dwingeloo Netherlands
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Regular data available on film, special purpose data available on digital mag tape after 1 month. Former station location: Nera (N52.23 E05,08) until 8/1972. Gaps in operation: 8-12/1971, 8-12/1972, 12/1973-1/1974, 4-5/1974, 8-11/1974.

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HARVARD
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ITEM: 173
DATE:25/03/75

DISCIPLINE	CØ4 Solar Radio Spectrograms of Events
STATION LATITUDE	N 30.64
STATION LONGITUDE	E 256.05
ALTERNATE NAMES	Fort Davis
DATES OF OPERATION	10/1956 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Solar Radio Spectrograph. Radio spectrograms of solar flares. Sweep frequency receivers covering the band 10-4000 MHz during sunspot maximum, and 25-320 MHz during sunspot minimum. Observations daily, sunrise to sunset.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular, Special
REGULAR REDUCED DATA AVAILABLE AFTER	25 MONTHS
FORM OF REDUCED DATA	Photographic prints, tables
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	at
ADDRESS FOR INFORMATION ABOUT STATION	A. Maxwell Harvard Radio Astronomy Station Fort Davis TX USA 79734
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Forms part of international 24-h watch on radio spectral characteristics of solar flares. Special purpose data available after 1 week.

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ITEM: 1001

purpose data available after 1 week.

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MANILA

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ITEM: 1001
DATE:03/06/75

DISCIPLINE ----------	C04 Solar Radio Spectrograms of Events
STATION LATITUDE ----------	N 14.64
STATION LONGITUDE ----------	E 121.08
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Sweep Interferometer Radiometer for 24-48 MHz, Dicke type radiometer, sunrise to sunset observations, 0.1 mm/s, twin antennas separated by 300 m on E-W orientation for sweep interferometer.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	The Director Manila Observatory P/O. Box 1231 Manila Philippines
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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C04 Solar Radio Spectrograms of Events (Cont.)

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NOBEYAMA
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ITEM: 441
DATE:28/03/75

DISCIPLINE ---------- C04 Solar Radio Spectrograms of Events
STATION LATITUDE ---------- N 35.93
STATION LONGITUDE ---------- E 138.48
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1975 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 70-220 MHz multi-channel radiospectrograph. 40 channel (4 MHz spacing), Time-resolution 10ms (in future), Two circular polarization measurements (in near future), Quantitative measurements are possible.
RAW DATA ---------- Digital magnetic tape, film, chart record
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Film, computer printouts (in near future, graphical plots also
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Keizo Kai
Nobeyama Solar Radio Station
Minamimakimura, Minamisakugun, Nagaro-k
Tokyo
Japan 384-13

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data usually available after 2 months.

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ONDREJOV

ITEM: 805
DATE:00/00/75

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SAGAMORE HILL
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ITEM: 522
DATE:11/07/75

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DISCIPLINE ---------- C04 Solar Radio Spectrograms of Events
STATION LATITUDE ---------- N 42.63
STATION LONGITUDE ---------- E 289.18
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1965 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- 24-48 MHz Swept Frequency Interferometer. Type I, II, III, IV, V Swept Frequency Burst. Sunrise to sunset operation daily. 1 sweep per second. Electrostatic recorder (1024 stylII) chart width approx. 14.5 inch. Chart speed is 0.33 inch per minute. Antenna system, 2 stationary bicone antennas.

RAW DATA ---------- 3-D recording of time, frequency and intensity; total power
DATA REDUCTION PRACTICE ---------- Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables of burst type, timing info, etc., punched cards
DATA ROUTINELY PUBLISHED ---------- 1)AFGL in house, 2)NOAA - SGD, 3)IAU Quarterly (QBSA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Mr. John P. Castelli
AFGL (LIR)
L. G. Hanscom Field
Bedford MA
USA 01730

ADDRESS FOR INFORMATION ABOUT DATA -------- Mr. William Barron
AFGL (LIR)
L. G. Hanscom Field
Bedford MA
USA 01730

ADDITIONAL COMMENTS ----- Data used by AWS and for research. Sweep range to be increased to 25 to 75 MHz. Special purpose data usually available immediately.

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ONDREJOV
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ITEM: 805
DATE:00/00/75

DISCIPLINE ---------- C04 Solar Radio Spectrograms of Events
STATION LATITUDE ---------- N 49.92
STATION LONGITUDE ---------- E 14.98
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Solar Radio Spectra at 50-810 MHz
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. L. Krivsky
Astronomical Institute
Ondrejov
Czechoslovakia 25165

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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C05 Solar X-Ray Observations

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BOULDER
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ITEM: 923
DATE:18/03/75

DISCIPLINE	C05 Solar X-ray Observations
STATION LATITUDE	N 39.98
STATION LONGITUDE	E 254.72
ALTERNATE NAMES	Boulder Observatory SOLTERWARN
DATES OF OPERATION	1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Satellite X-ray, Particle and Magnetic Sensors, ATS-1, GOES-1, GOES-2; Geostationary satellites with X-ray, particle and magnetic sensors provide continuous data to SOLTERWARN.
RAW DATA	Strip charts, magnetic tape
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip charts, magnetic tape
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Space Environment Services Center Space Environment Lab, ERL, NOAA 325 Broadway Boulder CO USA 80302
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of the USA Operational Flare Patrol Network. Events are relayed to other Regional Warning Centers in real time.

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C06 Sudden Ionospheric Disturbances

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ARCETRI
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ITEM: 24
DATE:02/04/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 43.75
STATION LONGITUDE	E 11.26
ALTERNATE NAMES	
DATES OF OPERATION	03/1970 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF Phasemeter, phase and amplitude recordings of NAA station at 17.8 kHz. TRACOR J controlled by a Cesium oscillator, continuous recordings, chart speed 4 inch/h.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Raffaele Barletti Arcetri Astrophysical Observatory Largo Enrico Fermi, 5 Firenze Italy 50125
ADDRESS FOR INFORMATION ABOUT DATA	Giuseppe Tagliaferri Arcetri Astrophysical Observatory Largo Enrico Fermi, 5 Firenze Italy 50125
ADDITIONAL COMMENTS	Special purpose data available after 2 months.

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ATHENS

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ITEM: 1152

DATE:15/05/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 37.85
STATION LONGITUDE	E 23.72
ALTERNATE NAMES	OL-C, 2 Weather Wing
DATES OF OPERATION	12/1965 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Razdow WS-250 Optical Telescope (H-alpha); AFGL Radio Telescopes, AFGL Polarimeter; observatory operates from sunrise to sunset daily, monitors four discrete radio frequencies (1415, 2695, 4995, and 8800 MHz); takes photos of the solar disk at a rate of 1 frame/min; monitors five high frequency receivers for detection of SWFs; monitors total electron content.
RAW DATA	Film, strip charts, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Logs, chart rolls
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	OL-C, 2 Weather Wing APO New York NY USA 09223
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data are at the National Observatory of Athens. The observatory moved from the heart of Athens (near the Acropolis) to Pendeli Hill (10 miles NE of old site) in May 1973.

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C06 Sudden Ionospheric Disturbances (Cont.)

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BELEM
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ITEM: 1033
DATE:12/03/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 1.39
STATION LONGITUDE	E 311.56
ALTERNATE NAMES	
DATES OF OPERATION	06/1974 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 Tracor 599R receivers).
RAW DATA	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Commanding Officer OMEGA Nav Sys Op US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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BELSK
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ITEM: 917
DATE:03/06/75

DISCIPLINE C06 Sudden Ionospheric Disturbances

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BERMUDA
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ITEM: 1012
DATE:12/03/75

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 32.26
STATION LONGITUDE ---------- E 295.12
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 10/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (3 Tracor 599R receivers).
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

phase. Some signal strength recording [illegible] used. Plans are for as many as 60 monitor stations.

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BELSK

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ITEM: 917

DATE: 03/06/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 51.84
STATION LONGITUDE	E 20.79
ALTERNATE NAMES	
DATES OF OPERATION	05/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Riometer Mark 1000 by Aerospace Research Inc. with 3 element Yagi antenna directed vertically. The strip chart recorder speed is 6 cm/h. Working frequency 27.6 MHz.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables, plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. W. Wernik Inst. of Geophysics, Polish Acad of S ul. Pasteura 3, P.O. Box 155 Warsaw Poland 00-973
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Reduced data after November 1975 are tables and plots of the hourly mean absorption, absorption in the first minute of each hour and the maximum absorption for each hour as well as USIDO information.

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C06 Sudden Ionospheric Disturbances (Cont.)

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BOULDER
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ITEM: 1027
DATE:12/03/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 40.00
STATION LONGITUDE	E 254.74
ALTERNATE NAMES	TELECOM Boulder
DATES OF OPERATION	08/1973 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h).
RAW DATA	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Commanding Officer OMEGA Nav Sys Oper D US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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CHUBU
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ITEM: 965
DATE:03/03/75

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EBRO
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ITEM: 1063
DATE:06/06/75

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 40.82
STATION LONGITUDE ---------- E .49
ALTERNATE NAMES ---------- Tortosa
DATES OF OPERATION ---------- 01/1958 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- Atmospheric radio noise, continuously, integrated to observe SEAs.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Observatorio del Ebro
Roquetas Tarragona
Spain

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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GULMARG
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ITEM: 940
DATE:02/12/75

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 34.07
STATION LONGITUDE ---------- E 74.42
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 11/1974 to present

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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CHUBU

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ITEM: 965
DATE:03/03/75

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 35.27
STATION LONGITUDE ---------- E 137.01
ALTERNATE NAMES ----------

Kasugai
DATES OF OPERATION --------- 01/1967 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- VLF stations: NWC 22.3 kHz, GBR 16 kHz, continuous operation
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. Dr. Atsushi Kimpara
Chubu Institute of Technology
1200 Matsumoto-cho
Kasugai-shi Aichi-ken, 487
Japan

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 2 months.

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ADDITIONAL COMMENTS -----

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GULMARG
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ITEM: 940
DATE: 02/12/75

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DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 34.07
STATION LONGITUDE ---------- E 74.42
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 11/1974 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ VLF Monitoring of D region ionization at 164 kHz.
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Paper recordings
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ H. Razdan
HARL-NRL, Bhabha Atomic Research Centr
Nasim Bagh
Srinagar Kashmir
India

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data available after 3 months.

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C06 Sudden Iono

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HALLEY BAY
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ITEM: 942
DATE: 20/06/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	S 75.52
STATION LONGITUDE	E 333.37
ALTERNATE NAMES	
DATES OF OPERATION	07/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	David Andersen Type DA-87 Riometer, continuous measure of cosmic noise at 27.6 MHz. Instrument similar to IGY Riometer (Little and Leinbach, Proc. IRE 47, 2 (1959)), chart speed 1 inch/h, or 2 inch/h. Antenna 3 element Yagi directed at South celestial pole.
RAW DATA	Strip charts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	10 MONTHS
FORM OF REDUCED DATA	Computer printout
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
	Slough, England
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. J. R. Dudeney British Antarctic Survey/Appleton La Ditton Park Slough Bucks England SL3 9JX
ADDRESS FOR INFORMATION ABOUT DATA	World Data Centre C1 Appleton Laboratory Ditton Park Slough Bucks England SL3 9JX
ADDITIONAL COMMENTS	Regularly scheduled reduction of data processed in yearly batches, normally available after 8-12 months.

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Sudden Ionospheric Disturbances (Cont.)

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E:20/06/75

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Survey/Appleton Lab

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SL3 9JX

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SL3 9JX
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HESTMONA
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DISCIPLINE	C06 Sudden Ionospheric Disturba	
STATION LATITUDE	N	66.53
STATION LONGITUDE	E	12.85
ALTERNATE NAMES		
DATES OF OPERATION	05/1967 to present	
OBSERVING SCHEDULE	Regular	
INSTRUMENT DESCRIPTION	OMEGA Receiver, phase differenc signals at one or more of these 10.2, 11.3, 13.6 kHz, digitized from strip charts (speed 1 inch AN/WRN-2 receivers).	
RAW DATA	Some strip chart some coding form	
DATA REDUCTION PRACTICE	Regular	
REGULAR REDUCED DATA AVAILABLE AFTER	2	MONTHS
FORM OF REDUCED DATA	Computer printou magnetic tape da	
DATA ROUTINELY PUBLISHED		
DATA SENT TO WDC-A		
DATA SENT TO WDC-B		
DATA SENT TO WDC-C		
DATA AVAILABLE ON REQUEST	Yes	
ADDRESS FOR INFORMATION ABOUT STATION	Commanding Offic US Coast Guard 2100 2nd St., S. Washington D USA	
ADDRESS FOR INFORMATION ABOUT DATA	Same as above	
ADDITIONAL COMMENTS	Some Cesium Standard available for phase. Some signal strength recor used. Plans are for as many as 60	

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ITEM: 1015
DATE:12/03/75

6 Sudden Ionospheric Disturbances
66.53
12.85

/1967 to present
gular
EGA Receiver, phase differences between OMEGA
gnals at one or more of these frequencies:
.2, 11.3, 13.6 kHz, digitized hourly readings
om strip charts (speed 1 inch/h). (3 ITT
/WRN-2 receivers).
---------- Some strip charts (continuous),
some coding forms (hourly data)
---------- Regular
TER ------ 2 MONTHS
---------- Computer printout data blocks,
magnetic tape data blocks

---------- Yes
ATION ----- Commanding Officer OMEGA Nav Sys Oper Det
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

TA -------- Same as above
Cesium Standard available for measuring one-way
e. Some signal strength recording instruments
. Plans are for as many as 60 monitor stations.

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C06 Sudden Ionospheric Disturbances (Cont.)

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HIRAISO
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ITEM: 951
DATE: 20/03/75

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 36.37
STATION LONGITUDE ---------- E 140.63
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Field Strength Meter on 10, 15, 20 MHz (WWV and WWVH), continuously recording on strip chart at speed of 6 to 12 cm/h.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ---------- IONOSPHERIC DATA IN JAPAN, monthly issued by RRL (15 MHz frequency)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
United Kingdom
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Hiraiso Branch
Radio Research Laboratories
3603 Isozaki-machi
Nakaminato-shi Ibaraki-Ken
Japan 311-12

ADDRESS FOR INFORMATION ABOUT DATA -------- WDC C2 for Ionosphere
Radio Research Laboratories
2-1, Nukui-Kitamachi 4-chome
Koganei-shi Tokyo
Japan 184

ADDITIONAL COMMENTS ----- Special purpose data available after 1 month.
Part of the CCIR Network (15 MHz).

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INUBO

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ITEM: 277

DATE:20/03/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 35.70
STATION LONGITUDE	E 140.86
ALTERNATE NAMES	
DATES OF OPERATION	02/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF Receiver, sudden ionospheric disturbances (SPA), continuously recording, strip chart 25 mm/h.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	IONOSPHERIC DATA IN JAPAN (RRL)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
	United Kingdom
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Inubo Radio Wave Observatory Radio Research Laboratories 9912 Tennodai Choshi-shi Chiba-Ken Japan 288
ADDRESS FOR INFORMATION ABOUT DATA	WDC-C2 for Ionosphere Radio Research Laboratories 2-1, Nukui-Kitamachi 4-chome Koganei-shi Tokyo Japan 184
ADDITIONAL COMMENTS	Special purpose data available after 1 month. CS standard (auxiliary equipment).

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C06 Sudden Ionospheric Disturbances (Cont.)

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KUHLUNGSBORN
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ITEM: 983
DATE:11/08/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 54.12
STATION LONGITUDE	E 11.77
ALTERNATE NAMES	
DATES OF OPERATION	1950 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Radiosets on various frequencies in the HF, MF, LF, and VLF range, 33 MHz radar equipment, phase-height measurements, continuous records
RAW DATA	Paper records, some film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	GEOPHYSIKALISCHE BEOBACHTUNGS-ERGEBNISSE (Geophysical Data) monthly bulletin
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Dr. K. Sprenger Observatorium fur Ionospharenforschung Mitschurin Str. 4-6 Kuhlungsborn German Dem Rep DDR 2565
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The monthly bulletin Geophysical Data is available from Akad. d. Wissenschaften der DDR, Zentralinstitut fur solar-terrestrische Physik (HHI), DDR 1199 Berlin-Adlershof.

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LA MOURE
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ITEM: 1024
DATE:12/03/75 4c

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 46.56
STATION LONGITUDE ---------- E 261.36
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 10/1972 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h).
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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LA POSTA
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ITEM: 990
DATE:15/05/75 4d

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 32.40

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LA POSTA
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ITEM: 990
DATE:15/05/75

4d

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 32.40
STATION LONGITUDE ---------- E 243.50
ALTERNATE NAMES ---------- OL C, 12 Weather Squadron
Navy Electronic Lab Cen (NELC)
DATES OF OPERATION ---------- 10/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Oblique Sounder monitors 6 very low frequency (VLF) receivers for Sudden Phase Anomaly (SPA); monitors 5 high frequency (HF) receivers for Short Wave Fade (SWF). Observatory operates daily from sunrise to sunset.

RAW DATA ---------- Logs, chart rolls
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Logs, chart rolls
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- OL C, 12th Weather Squadron
Route 1, Box 591
Campo CA
USA 92006

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data are regularly sent to NELC, San Diego.

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C06 Sudden Ionos

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LATROBE
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ITEM: 334
DATE:18/02/75

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 40.28
STATION LONGITUDE ---------- E 280.72
ALTERNATE NAMES ----------
Network Station A-19

SID-SVC-A-19
DATES OF OPERATION ---------- 04/1966 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- (a)Receiver model RBA-3, Type CFT-46154, (b)SID-Integrated circuit receivers (own design). SES and SEA recorded. The receivers using integrated circuit RCA 3055 (CA) were developed during 1971 and proved to be the most sensitive to any SID. The following frequencies are commonly used -- 18.6, 24, 27, 34.5, 37.2, 37.76 and 73.6 kHz. 4 signals are recorded 24 h/day. Recorders are Rustrak, chart style A.

RAW DATA ---------- Strip chart (Rustrak, Style A)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- SOLAR BULLETIN of AAVSO solar Div. publishes SIDs monthly, also in SOLAR-GEOPHYSICAL DATA (NOAA, US Dept. of Commerce, Boulder, CO 80302 USA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. Jaroslav J. Slezak
Saint Vincent College
Department of Physics
Latrobe PA
USA 15650

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- I participate with the Solar Division of the American Association of Variable Star Observers (AAVSO) as a member of the Indirect Solar Flare Patrol Network, Station A-19.

ospheric Disturbances (Cont.)

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LITTLETON
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ITEM: 350
DATE: 04/04/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 39.63
STATION LONGITUDE	E 255.02
ALTERNATE NAMES	A-21
DATES OF OPERATION	08/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	SES (Sudden Enhancement of Signal) VLF radio receiver and strip chart recorder, amplitude of received VLF radio signals for indirect detecti of solar flares and related X-rays, etc. One t three receivers with strip chart recorders oper ting 24 h/day at one inch/h.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tabular
DATA ROUTINELY PUBLISHED	Informal publication for selecte members of group giving condense tabular data with some reproduc- tion of interesting events. 1-3 pages only, monthly.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Keith L. Strait 6693 South Grant Street Littleton CO USA 80121
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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C06 Sudden Ionosp

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MAKAPUU PT
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ITEM: 1021
DATE:12/03/75

DISCIPLINE ---------- C06 Sudden Ionospheric Phenomena
STATION LATITUDE ---------- N 21.31
STATION LONGITUDE ---------- E 202.35
ALTERNATE NAMES ---------- Honolulu
DATES OF OPERATION ---------- 03/1972 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (4 ITT AN/URN-18 (XN-1) receivers).
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper D
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

ospheric Disturbances (Cont.)

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MANILA
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ITEM: 999
DATE:15/05/75

DISCIPLINE	CØ6 Sudden Ionospheric Disturbances
STATION LATITUDE	N 14.52
STATION LONGITUDE	E 121.00
ALTERNATE NAMES	
DATES OF OPERATION	10/1966 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	AFGL Radio Telescopes, observatory operates dai from sunrise to sunset. Monitors 5 discrete frequencies: 606, 1415, 2695, 4995, 8800 MHz; sweep frequency interferometer 24-48 MHz.
RAW DATA	Film, strip charts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Logs, chart rolls
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Manila Observatory P.O. Box 1231 Manila, Philippines
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MCMATH-HULBERT
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ITEM: 1077
DATE:27/03/75

DISCIPLINE	CØ6 Sudden Ionospheric Disturbances
STATION LATITUDE	N 42.66
STATION LONGITUDE	E 276.74
ALTERNATE NAMES	
DATES OF OPERATION	1932 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	High resolution solar Spectrograph, Spectroheli graph, H-alpha Photoheliograph: solar activity plages (Ca II and H-alpha), solar flares, sun-spots
RAW DATA	Film, strip charts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)

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MCMATH-HULBERT

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ITEM: 1077

DATE:27/03/75

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DISCIPLINE ----------	C06 Sudden Ionospheric Disturbances
STATION LATITUDE ----------	N 42.66
STATION LONGITUDE ----------	E 276.74
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1932 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	High resolution solar Spectrograph, Spectroheliograph, H-alpha Photoheliograph; solar activity plages (Ca II and H-alpha), solar flares, sunspots
RAW DATA ----------	Film, strip charts
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	McMath-Hulbert Observatory University of Michigan 895 N. Lake Angelus Road Pontiac MI USA 48055
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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C06 Sudden Ionospheric Disturbances (Cont.)

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NISHINOMIYA
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ITEM: 438
DATE:09/06/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 34.72
STATION LONGITUDE	E 135.38
ALTERNATE NAMES	
DATES OF OPERATION	07/1974 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Field intensity and relative phase of the VLF wave from Jim Creek (NLK, 18.6 kHz), VLF/LF Tracking Receiver (Tracor model 599K), Cesium Beam Frequency Standard (HP model 5061A) reference, loop antenna (Tracor model 599-603D). The field intensity and relative phase lag between received VLF wave and 100 kHz wave frequency standard are recorded continuously on strip chart with speed 2cm/h. Planned: receive VLF wave from Cutler (NAA, 17.8 kHz), Maine, USA with same type of receiver.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Special , None
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Teruo Sato Hyogo College of Medicine, Physics Dept 1-1, Mukogawa-cho Nishinomiya Hyogo Japan 663
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station operated with only one receiver when first started, then with two receivers after 07/1975. Special purpose data usually available after one month.

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NORFOLK

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ITEM: 1036
DATE:12/03/75

DISCIPLINE ----------	C06 Sudden Ionospheric Disturbances
STATION LATITUDE ----------	N 36.82
STATION LONGITUDE ----------	E 285.71
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (1 Tracor 599R receiver).
RAW DATA ----------	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding Officer OMEGA Nav Sys Oper D US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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PALEHUA

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ITEM: 1120
DATE:15/05/75

DISCIPLINE ----------	C06 Sudden Ionospheric Disturbances

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PALEHUA

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ITEM: 1120
DATE:15/05/75

DISCIPLINE ----------	C06 Sudden Ionospheric Disturbances
STATION LATITUDE ----------	N 21.38
STATION LONGITUDE ----------	E 201.93
ALTERNATE NAMES ----------	OL-D, 1 Weather Wing
DATES OF OPERATION ----------	10/1969 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow WS-120 optical telescope (H-alpha), AFGL radio telescopes; operate from sunrise to sunset daily. Monitors 2 discrete radio frequencies: 1415 and 8800 MHz. Take 35 mm photos of the solar disk at a rate of 1 frame/min. Monitors high frequency receivers for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 1 Weather Wing APO San Francisco USA 96553
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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C06 Sudden Ionospheric Disturbances (Cont.)

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PIARCO
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ITEM: 1042
DATE:12/03/75

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 10.60
STATION LONGITUDE ---------- E 298.65
ALTERNATE NAMES ---------- Trinidad
DATES OF OPERATION ---------- 01/1972 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 ITT AN/URN-18 (XN-1) receivers)
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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PRESTON

ITEM: 477
DATE:01/07/75

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RAMEY

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ITEM: 481

DATE:13/03/75

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances

STATION LATITUDE ---------- N 18.50

STATION LONGITUDE ---------- E 292.80

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 08/1971 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- R390A Radio receiver; 880 VLF receiver, sudden ionospheric disturbances (SID), high frequency receivers: five frequencies monitored in range of 10 to 22 MHz. Daily observations from sunrise to sunset. Esterline Angus recorders utilized chart speed 3 inch/h). VLF Receivers: two frequencies monitored in range of 16 to 24 kHz. Daily observations from sunrise to sunset. Rustrak recorders utilized (chart speed 1 inch/h).

RAW DATA ---------- Charts

DATA REDUCTION PRACTICE ---------- None

REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS

FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ---------- Yes

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- OL-D, 12 WSQ (MAC)
Box 261
FPO NY
USA 09549

ADDRESS FOR INFORMATION ABOUT DATA -------- Natl Geop & Solar-Terrestrial Data C
NOAA/EDS
Boulder CO
USA 80302

ADDITIONAL COMMENTS -----

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PRESTON

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ITEM: 477

DATE:01/07/75

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances

STATION LATITUDE ---------- N 53.77

STATION LONGITUDE ---------- E 357.30

ALTERNATE NAMES ----------

Jeremiah Horrocks Obs

DATES OF OPERATION ---------- 06/1957 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- SEA Recording, daily recording at 27 KHz, chart speed 1 inch/hour.

RAW DATA ---------- Strip chart

DATA REDUCTION PRACTICE ---------- Regular

REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS

FORM OF REDUCED DATA ---------- Tables

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ---------- Yes

DATA SENT TO WDC-B ---------- Yes

DATA SENT TO WDC-C ---------- Yes

Slough, UK

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. V. Barocas
Jeremiah Horrocks Observatory
Moor Park
Preston Lancashire
U.K. PRI 6AD

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above

ADDITIONAL COMMENTS -----

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C06 Sudden Ionospheric Disturbances (Cont.)

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RIO DE JANEIRO
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ITEM: 1030
DATE:12/03/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	S 22.87
STATION LONGITUDE	E 316.87
ALTERNATE NAMES	
DATES OF OPERATION	09/1973 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 Tracor 599R receivers).
RAW DATA	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Commanding Officer OMEGA Nav Sys Oper D US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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SAGAMORE HILL

ITEM: 511
DATE:13/03/75

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SAO PAULO
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ITEM: 541
DATE:13/03/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	S 23.17
STATION LONGITUDE	E 313.43
ALTERNATE NAMES	Centre of Radio Astronomy and Astrophysics - Mackenzie Univ
DATES OF OPERATION	04/1966 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF Tracking Receivers (6). VLF phase and amplitude from 6 transmitters. Tracor (Model 599G) VLF receiver; 4 of them are located at the Itapetinga Radio Observatory and the other 2 in a mobile station. Observing schedule: Itapetinga Radio Obs - 24 hours a day; Mobile Station - 21 days each city. Chart speed 4 inch/h.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Computer printouts
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Centro de Radio Astronomia e Astrofisi Universidade Mackenzie, CRAAM Rua Maria Antonia No. 403 Sao Paulo SP Brazil CP 8792
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	From April 1966 until August 1970 - The station was located at: S22.8, W45.5.

phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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SAGAMORE HILL
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ITEM: 511
DATE:13/03/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 42.63
STATION LONGITUDE	E 289.18
ALTERNATE NAMES	
DATES OF OPERATION	01/1966 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	1)R390 SW Receiver, short wave fadeout monitoring Monitor two discrete frequencies in 10-15 MHz and 15-20 MHz range. Also have an experimental monitoring device which sweeps the range 5-15 MHz using a Hewlett-Packard spectrum analyzer. 2)Mark II Riometer--measures SCNA at 30 MHz.
RAW DATA	Analog charts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Locally created data reduction sheets
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	John P. Castelli AFGL Hanscom AFB Bedford MA USA 01730
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station is part of USAF AWS SESS

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C06 Sudden Ionosp

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SARDINIA
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ITEM: 1018
DATE:12/03/75

DISCIPLINE ---------- C06 Sudden Ionospheric Disturbances
STATION LATITUDE ---------- N 39.18
STATION LONGITUDE ---------- E 9.16
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 02/1969 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (2 Tracor 599R receivers).
RAW DATA ---------- Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Commanding Officer OMEGA Nav Sys Oper
US Coast Guard
2100 2nd St., S.W.
Washington DC
USA 20024

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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Sudden Ionospheric Disturbances (Cont.)

M: 1018
E:12/03/75

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OMEGA Nav Sys Oper Det

20024

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ST. CLOUD
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DISCIPLINE	C06 Sudden Ionospheric Disturba
STATION LATITUDE	N 45.57
STATION LONGITUDE	E 265.81
ALTERNATE NAMES	
DATES OF OPERATION	01/1974 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF signal strength receiver(s) spheric disturbances. VLF sign ceiver used to monitor VLF sign kHz, 24.0 kHz, etc.) continuous hour period. Recorded on Ester strip chart recorder with chart per hour. Usually two stations taneously by switching techniqu
RAW DATA	Strip chart reco
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables of sudden turbances
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICA Published in co after processing
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Alexander S. Mc 813 North 24th St. Cloud USA
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Auxiliary electronic equipment an ing used to continuously monitor tivity in VLF signal strengths, w related to geomagnetic activity. continued and were begun around 0 solar rotations), in present form records are also available severa a different form.

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ITEM: 574
DATE:18/03/75

----- C06 Sudden Ionospheric Disturbances
----- N 45.57
----- E 265.81

----- 01/1974 to present
Station moved
----- Regular
----- VLF signal strength receiver(s). Sudden ionospheric disturbances. VLF signal strength receiver used to monitor VLF signal strengths (18.6 kHz, 24.0 kHz, etc.) continuously throughout 24-hour period. Recorded on Esterline Angus 6 inch strip chart recorder with chart speed 1.5 inches per hour. Usually two stations recorded simultaneously by switching technique.
---------- Strip chart recordings
---------- Regular
AILABLE AFTER ------ 1 MONTHS
---------- Tables of sudden ionospheric disturbances
D ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
Published in compiled form by NOAA after processing through WDC-A
---------- Yes

ST ---------- Yes
ABOUT STATION ----- Alexander S. McWilliams
813 North 24th Avenue
St. Cloud MN
USA 56301

ABOUT DATA -------- Same as above
-- Auxiliary electronic equipment and recorders are being used to continuously monitor the fluctuation activity in VLF signal strengths, which is found to be related to geomagnetic activity. Records are being continued and were begun around 08/1974 (about 7 solar rotations), in present form. Some previous records are also available several months earlier in a different form.

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284

C06 Sudden Ionospheric Disturbances (Cont.)

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TANANARIVE
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ITEM: 593
DATE: 02/06/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	S 18.55
STATION LONGITUDE	E 47.55
ALTERNATE NAMES	
DATES OF OPERATION	06/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	VLF Phase tracking receivers (3). VLF Sudden phase anomalies (SPA). Phase tracking of VLF radio waves monitored on 3 propagation paths (usually: USA-Tananarive, Great Britain-Tananarive and Australia-Tananarive). Phase is recorded with 100 s scale. Phase reference is obtained with H.P. Cesium Beam Frequency Standard.
RAW DATA	Strip charts of VLF phase
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	List of SPA events
DATA ROUTINELY PUBLISHED	BULLETIN DE LOBSERVATOIRE DE TANANARIVE (Monthly), B P 3843 Tananarive Madagascar
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	J. M. de Comarond Observatoire de Tananarive BP 3843 Tananarive Madagascar
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Strip chart of VLF phase is on 100 s scale and 2 inch/h speed starting 1970 at the station. At INTERNATIONAL VLF, P.O. Box A, Deal, NJ, USA, Strip charts at 4 inch/h, starting 06/1975. Lists of SPA Events give time of beginning, time of maximum, time of end, magnitude of phase advance in degrees and in microseconds.

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TANANARIVE

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ITEM: 1039
DATE:12/03/75

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DISCIPLINE ----------	C06 Sudden Ionospheric Disturbances
STATION LATITUDE ----------	S 18.92
STATION LONGITUDE ----------	E 47.55
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	OMEGA Receiver, phase differences between OMEGA signals at one or more of these frequencies: 10.2, 11.3, 13.6 kHz, digitized hourly readings from strip charts (speed 1 inch/h). (3 Tracor 599R receivers).
RAW DATA ----------	Some strip charts (continuous), some coding forms (hourly data)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printout data blocks, magnetic tape data blocks
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Commanding Officer OMEGA Nav Sys Oper De US Coast Guard 2100 2nd St., S.W. Washington DC USA 20024
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Some Cesium Standard available for measuring one-way phase. Some signal strength recording instruments used. Plans are for as many as 60 monitor stations.

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TEHRAN

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ITEM: 1113
DATE:15/05/75

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used. Plans are for as many as 60 monitor stations.

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TEHRAN

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ITEM: 1113
DATE:15/05/75

DISCIPLINE ----------	C06 Sudden Ionospheric Disturbances
STATION LATITUDE ----------	N 35.70
STATION LONGITUDE ----------	E 51.47
ALTERNATE NAMES ----------	OL-D, 2 Weather Wing
DATES OF OPERATION ----------	12/1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow W-120 Optical Telescope (H-alpha); observatory operates daily from sunrise to sunset, takes 35 mm photos of the solar disk at a rate of 1 frame/min; monitors high frequency receivers for detection of SWFs.
RAW DATA ----------	Film, strip charts, drawings
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	OL-D, 2 Weather Wing APO Box 1500 New York USA 09205
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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C06 Sudden Ionosp

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TORINO
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ITEM: 617
DATE:03/03/75

DISCIPLINE	C06 Sudden Ionospheric Disturbances
STATION LATITUDE	N 45.05
STATION LONGITUDE	E 7.67
ALTERNATE NAMES	IEN - Torino
DATES OF OPERATION	01/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Tracor VLF Tracking Receivers, Phase and amplitudes from GBR and MSF stations, Tracor VLF Tracking Receivers supplying continuous data, recording on "Punktdrucker Typ NSC" of Joens every 2 minutes, chart speed 2 cm/h.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	IEN SPA monthly list - Internal publication mailed also to WDC-A available at IEN, Corso Massimo dAzeglio 42-10125 Torino, Italy
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	No
DATA SENT TO WDC-C	No
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	G. C. Rumi Ist Elettrotecnico Naz Galileo Ferraris Corso Massimo dAzeglio, 42 Torino Italy 10125
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

nospheric Disturbances (Cont.)

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VALLEY COTTAGE
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ITEM: 1068
DATE:06/03/75

DISCIPLINE ----------	C06 Sudden Ionospheric Disturbances
STATION LATITUDE ----------	N 41.07
STATION LONGITUDE ----------	E 286.45
ALTERNATE NAMES ----------	A1 AAVSO
DATES OF OPERATION ----------	03/1955 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	4 VLF Receivers and Recorder (graphical) for indirect detection of solar flares; designed and built most modern integrated circuit receivers (costing about $35) for many of our 41 worldwide stations in our group network (AAVSO). Observin schedule 24 h continuous; chart speed 1 inch/h; reporting to NOAA Boulder (WDC-A).
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Tables, paper tape
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	David Warshaw Solar Division, AAVSO 141 Quaspeck Blvd. Valley Cottage NY USA 10989
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	D. Warshaw created worldwide network of 41 observer American Association of Variable Star Observers (AAVSO). Continuously monitor by radio receivers i the VLF region and record sudden enhancements of atmospherics; sudden enhancement of signals and short wave fadeouts and records these on strip char recorders moving at 1 inch/h on a 24 h basis.

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C07 Solar Protons and Electrons - Direct Measurement

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BOULDER
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ITEM: 924
DATE:18/03/75

DISCIPLINE	C07 Solar Protons and Electrons - Direct Measurement
STATION LATITUDE	N 39.98
STATION LONGITUDE	E 254.72
ALTERNATE NAMES	Boulder Observatory SOLTERWARN
DATES OF OPERATION	1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Satellite X-ray, Particle and Magnetic Sensors, ATS-1, GOES-1, GOES-2; Geostationary satellites with X-ray, particle and magnetic sensors provide continuous data to SOLTERWARN.
RAW DATA	Strip charts, magnetic tape
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip charts, magnetic tape
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Space Environment Services Center Space Environment Lab, ERL, NOAA 325 Broadway Boulder CO USA 80302
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of the USA Operational Flare Patrol Network. Events are relayed to other Regional Warning Centers in real time.

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ITEM: 422
DATE: 02/10/75

MURMANSK
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DISCIPLINE	C07 Solar Protons and Electrons - Direct Measurements
STATION LATITUDE	N 68.95
STATION LONGITUDE	E 33.05
ALTERNATE NAMES	Olenja, Murmansk Region
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Balloon Cosmic Ray Intensity Measurement in Stratosphere. RKI radiosound consists of two G-M tubes arranged as telescope interlayed by a 7mm thick aluminium plate. Wall thickness of G-M tube is 0.05 G/sq cm of steel. The counting rate of a single counter and two-counter coincidences are recorded. The balloons are launched every day at 0700 UT, every day except Sunday at 1100 UT.
RAW DATA	Tables, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1.5-2 MONTHS
FORM OF REDUCED DATA	Tables of cosmic ray flux dependence on stratospheric pressure
DATA ROUTINELY PUBLISHED	Beginning from January, 1972, data on Cosmic Ray Intensity at Transition Maximum in stratosphere are routinely published by Soviet Review of COSMIC DATA, Publishing House Nauka, Moscow.
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Yu I. Stozhkov P. N. Lebedev Physical Institute Leninsky Prospect, 53 Moscow USSR 117313
ADDRESS FOR INFORMATION ABOUT DATA	Dr. G. A. Bazilevskaya P. N. Lebedev Physical Institute Leninsky Prospect, 53 Moscow USSR 117313
ADDITIONAL COMMENTS	From 07/1957 to 04/1958 observation had been occasional, since 05/1958 observations are regularly scheduled.

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C07 Solar Protons and Ele

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RAMEY
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ITEM: 1125
DATE:15/05/75 1c

DISCIPLINE ----------	C07 Solar Protons and Electrons - Direct Measurements
STATION LATITUDE ----------	N 18.52
STATION LONGITUDE ----------	E 292.90
ALTERNATE NAMES ----------	OL D, 12 Weather Squadron
DATES OF OPERATION ----------	08/1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Razdow Optical H-Alpha Telescope WS-250; observatory operates daily from 1/2h before sunrise to 1/2h after sunset; 35 mm photo of sun, one frame per min; Yagi antenna for monitoring satellite beacon to determine total electron count; monitors 5 high frequency receivers for short wave fade and 2 very low frequency receivers for sudden phase anomaly; 4 inch unitron white light photographs for sunspot drawings.
RAW DATA ----------	Film, drawings, logs
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Film, photographic prints, graphical plots
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	OL D, 12 Weather Squadron Box 261, FPO New York USA 09549
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

ons and Electrons - Direct Measurement (Cont.)

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: 1125
:15/05/75

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C08 Solar Protons - Riometer

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DAVIS
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ITEM: 937
DATE: 06/06/75

DISCIPLINE	C08 Solar Protons - Riometer
STATION LATITUDE	S 68.58
STATION LONGITUDE	E 77.96
ALTERNATE NAMES	
DATES OF OPERATION	02/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard Riometer, continuous recording measurement of ionospheric opacity at 33 MHz, Solid state, UDC number 551.510. 53·551. 508 - THE RIOMETER: A STATE-OF-THE-ART DESIGN, features transistor noise source and integrated IC OPAMPS, CMOS Gates. Calibrated automatically daily.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Director Antarctic Division, Dept of Science 568 St. Kilda Road Melbourne Victoria Australia 3004
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	PCA reported to Ionospheric Prediction Service Division, Sydney.

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HALLEY BAY
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ITEM: 943
DATE:20/06/75

DISCIPLINE ---------- C08 Solar Protons - Riometer
STATION LATITUDE ---------- S 75.52
STATION LONGITUDE ---------- E 333.37
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1972 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ David Andersen Type DA-87 Riometer, continuous measure of cosmic noise at 27.6 MHz. Instrument similar to IGY Riometer (Little and Leinbach, Proc. IRE 47, 2 (1959)), chart speed 1 inch/h, or 2 inch/h. Antenna 3 element Yagi directed at South celestrial pole.
RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------- 10 MONTHS
FORM OF REDUCED DATA ---------- Computer printout
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Slough, England
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. J. R. Dudeney
British Antarctic Survey/Appleton Lab
Ditton Park
Slough Bucks
England SL3 9JX

ADDRESS FOR INFORMATION ABOUT DATA ---------- World Data Centre C1
Appleton Laboratory
Ditton Park
Slough Bucks
England SL3 9JX
ADDITIONAL COMMENTS ------ Regularly scheduled reduction of data processed in yearly batches, normally available after 8-12 months.

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PENTELI
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ITEM: 909
DATE:18/03/75

DISCIPLINE ---------- C08 Solar Protons - Riometer
STATION LATITUDE ---------- N 38.05

ADDITIONAL COMMENTS ------ Regularly scheduled reduction of data processed in yearly batches, normally available after 8-12 months.

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ITEM: 909
DATE:18/03/75

DISCIPLINE ---------- C08 Solar Protons - Riometer
STATION LATITUDE ---------- N 38.05
STATION LONGITUDE ---------- E 23.86
ALTERNATE NAMES ---------- Athens
National Observatory of Athens

DATES OF OPERATION ---------- 03/1970 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ------ Riometer, SWF observatons, five receivers between 6 and 22 MHz.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 0.5 MONTHS
FORM OF REDUCED DATA ---------- Tables, films, photographic paper
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Meudon, France
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Astronomical Institute
National Observatory of Athens
Athens
Greece 306

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data available after 0.5 months.

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C13 Cosmic Ray

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SANAE
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ITEM: 1047
DATE:23/06/75

DISCIPLINE ----------	C13 Cosmic Ray Ground Level Increases
STATION LATITUDE ----------	S 70.31
STATION LONGITUDE ----------	E 357.64
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	02/1964 to present Station moved Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	3-NM-64 Neutron monitor, standard super monitor, 10 min recording of counting rate and pressure
RAW DATA ----------	Punch tape, digital printout, magnetic tape, computer printout
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printout, graphs, magnetic tape
DATA ROUTINELY PUBLISHED ----------	COSMIC RAY NEUTRON MONITOR DATA, SANAE
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Cosmic Ray Research Unit Department of Physics Potchefstroom University for CHE Potchefstroom South Africa 2520
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	No data available from 4 February 1971 to 17 March 1971 when station was moved about 500m. Special purpose data available after 1 month.

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SANAE
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ITEM: 1153
DATE: 23/06/75

DISCIPLINE ----------	C13 Cosmic Ray Ground Level Increases
STATION LATITUDE ----------	S 70.31
STATION LONGITUDE ----------	E 357.64
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	05/1971 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	4-NMD Neutron Moderated Detector with 4 BP28 Chalk River neutron tubes surrounded by 7.5 cm paraffin wax. 10 minute recording of counting rate and pressure.
RAW DATA ----------	Punch tapes, digital printout, magnetic tape, computer printout
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printouts, graphs, magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Cosmic Ray Research Unit Department of Physics Potchefstroom University for CHE Potchefstroom South Africa 2520
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data avaialable after 1 month. 1-NMD started 1 May 1971, stopped February 1974. 4-NMD started 21 March 1974.

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D. Geomagnetic Variations

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292

D01 Geomagnetic Standa

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ADELAIDE ISLAND
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ITEM: 3
DATE:20/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 67.76
STATION LONGITUDE	E 291.08
ALTERNATE NAMES	
DATES OF OPERATION	03/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	E.D.A. Fluxgate Magnetometer, Continuous recording of three components of magnetic field for control of field surveys. Records of H, D, Z; sensitivity 15 gamma/mm switching automatically to 30 gamma/mm in magnetic storms, chart speed 20 mm/h.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	W. M. Sievwright British Antarctic Survey Drummond Street Edinburgh Scotland EH8 9UA
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Baseline control by QHM, BMZ, PPM. The station is likely to be run at its present location for one or two years and the program thereafter transferred to another site (dependent on location of field work). Special purpose data available after 24 months.

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AHMEDABAD
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ITEM: 737
DATE:00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 23.01
STATION LONGITUDE	E 72.60
ALTERNATE NAMES	
DATES OF OPERATION	

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ırd and Rapid Run Measurements

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ALERT
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ITEM: 7
DATE:02/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 82.50
STATION LONGITUDE ---------- E 297.50
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 10/1961 to present
Intermittent operation
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- 3-component Recording Fluxgate Magnetometer, analog recordings of the Earths magnetic field. X(North), Y(East), Z(Vertical), continuously recorded on paper chart with speed of 20 mm/h.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Div. of Geomagnetism, Earth Physics B
Dept. of Energy, Mines & Resources
1 Observatory Cres.
Ottawa Ontario
Canada K1A 0Y3

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Photographic recording was discontinued 30/09/72.

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Baseline control by QHM, BMZ, PPM. The station is likely to be run at its present location for one or two years and the program thereafter transferred to another site (dependent on location of field work). Special purpose data available after 24 months.

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AHMEDABAD
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ITEM: 737
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 23.01
STATION LONGITUDE ---------- E 72.60
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Standard Magnetometer
RAW DATA ---------- Photorecorded graphics
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER -------- MONTHS
FORM OF REDUCED DATA ---------- Photorecorded graphics, tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------- Prof. Ram Gopal Rastogi
Physical Research Laboratory
Navrangpura
Ahmedabad Gujarat
India 380009

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS -------

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D01 Geomagnetic Standard an

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ALIBAG
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ITEM: 10
DATE:02/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 18.64
STATION LONGITUDE	E 72.87
ALTERNATE NAMES	
DATES OF OPERATION	04/1904 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	A set of D, H and Z magnetographs by Watson. Variations of the three geomagnetic elements D, H and Z are continuously recorded, along with baselines whose values are determined separately. Recorded on photographic paper, each element separate, at 15 mm/h; charts shifted around 3 UT every other day. Time marks recorded every hour by automatic cutting of recording light by a shutter for 2 min after UT hour. Quick run gear for 180 mm/h speed added to H, D magnetographs early in 1949.
RAW DATA	Photographic paper, microfilm copies
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Monthly tables in computer printout form
DATA ROUTINELY PUBLISHED	INDIAN MAGNETIC DATA, published annually by the Director, Indian Institute of Geomagnetism, Colaba, Bombay 400 005, India
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. B. N. Bhargava, Director Indian Institute of Geomagnetism Dr. Nanabhai Moos Marg Colaba, Bombay Maharashtra India 400 005
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Alibag succeeds Colaba, Bombay Magnetic Observatory started in 1846 and closed in 1905. Alibag is 28 km (18 miles) SSE of Colaba. D, H and Z magnetographs by La Cour operated continuously at Alibag since 1946, recording photographically H and Z traces on one chart and D separately at paper speed of 15 mm/h. Hourly mean values of D and Z are reported from La Cour records instead of Watson records from 1949 to 1972. Watson H mean values given.

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tic Standard and Rapid Run Measurements (Cont.)

TEM: 10
ATE:02/06/75

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ed separately.
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corded every hour
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n computer print-

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of Geomagnetism
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netic Observatory
. Alibag is 28 km
d Z magnetographs
t Alibag since
and Z traces on
t speed of 15 mm/
re reported from
ecords from 1949
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ALMA ATA
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DISCIPLINE	D01 Geomag Standard and Rapid
STATION LATITUDE	N 43.25
STATION LONGITUDE	E 76.92
ALTERNATE NAMES	
DATES OF OPERATION	01/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard Magnetometer
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTH
FORM OF REDUCED DATA	Photographic pr
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	M. P. Rudina Ionospheric Sec 68 Kamenskoe Pl Alma-Ata USSR
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ALMERIA
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DISCIPLINE	D01 Geomag Standard and Rapid
STATION LATITUDE	N 36.85
STATION LONGITUDE	E 357.54
ALTERNATE NAMES	
DATES OF OPERATION	01/1955 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour Magnetometer, Absolute D, H, Z Variographs, QHM, BMZ, H, Z variograph speed 15 mm/h. ments weekly.
RAW DATA	Film, photograp
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTH
FORM OF REDUCED DATA	Tables, microfi
DATA ROUTINELY PUBLISHED	ANUARIOS DEL SI TISMO Y AERONO

s (Cont.)

ITEM: 832
DATE:00/00/75

1 Geomag Standard and Rapid Run Measurements
43.25
76.92

/1963 to present
gular
andard Magnetometer

TER ------ MONTHS
--- Photographic prints, black/white

TION ------ M. P. Rudina
Ionospheric Section, Academy Sci of Kaz SSR
68 Kamenskoe Plato
Alma-Ata
USSR

A --------- Same as above

ITEM: 16
DATE:06/06/75

1 Geomag Standard and Rapid Run Measurements
36.85
357.54

/1955 to present
gular
Cour Magnetometer, Absolute Magnetometers--
H, Z Variographs, QHM, BMZ, Declinometer. D,
Z variograph speed 15 mm/h. Absolute measure-
nts weekly.
--- Film, photographic paper, tables
--- Regular
TER ------ 2 MONTHS
--- Tables, microfilm
--- ANUARIOS DEL SERVICIO DE GEOMAGNE-

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ALMERIA

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ITEM: 16
DATE:06/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 36.85
STATION LONGITUDE ---------- E 357.54
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1955 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- La Cour Magnetometer, Absolute Magnetometers--D, H, Z Variographs, QHM, BMZ, Declinometer. D, H, Z variograph speed 15 mm/h. Absolute measurements weekly.

RAW DATA ---------- Film, photographic paper, tables
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, microfilm
DATA ROUTINELY PUBLISHED ---------- ANUARIOS DEL SERVICIO DE GEOMAGNETISMO Y AERONOMIA, Instituto Geografico y Catastral, Madrid, available on exchange

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Charlottenlund

DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- L. De Miguel
Instituto Geografico y Catastral
Gral Ibanez De Ibero, 3
Madrid
Spain 3

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Published tables of hourly and mean values, K indices, magnetic phenomena.

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D01 Geomagnetic Standard

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AMBERLEY
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ITEM: 17
DATE:28/07/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 43.16
STATION LONGITUDE ---------- E 172.75
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1902 to present
Station moved in 1928
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- La Cour Magnetometer, Eschenhagen magnetometer -- continuous recording of H, D, Z. Standard La Cour recording continuously at 20 mm/h.
RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Tables, punched paper tape
DATA ROUTINELY PUBLISHED ---------- MAGNETIC RESULTS AMBERLEY OBSERVATORY, yearly, exchange basis, hourly values H,D,Z, means, storm descriptions
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Officer-in-Charge
Geophysical Observatory
P.O. Box 2111
Christchurch
New Zealand

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Station was originally set up in Christchurch, but moved to Amberley in 1928 to avoid electrical disturbance.

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ITEM: 19
DATE:05/05/75

rd and Rapid Run Measurements (Cont.)

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ITEM: 20
DATE:02/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 11.37
STATION LONGITUDE	E 79.68
ALTERNATE NAMES	
DATES OF OPERATION	10/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	D, H and Z Askania Variometers by Eschenhagen. Variations of the 3 geomagnetic elements D, H & Z are continuously recorded along with baseline whose values are determined separately. H and Z variometers are compensated for temperature variations. All 3 elements are recorded on a single photographic paper at a chart speed of 20 mm/h. Quick run gears for speeds of 40 mm/h and 120 mm/h are also provided for the recorder.
RAW DATA	Photographic paper, microfilm
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables of computer printout
DATA ROUTINELY PUBLISHED	INDIAN MAGNETIC DATA, annual, Director, Indian Institute of Geomagnetism, Colaba, Bombay 400 005, India
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. B. N. Bharava, Director Indian Institute of Geomagnetism Dr. Nanabhai Moos Marg Colaba, Bombay Maharashtra India 400 005
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Published data are monthly tables of mean hourly value of the three elements D, H and Z and magnetic storm statistics. Daily observations of absolute H and Z with QHM and BMZ. Wednesday noon absolute D observations with QHM. Observed absolu values are periodically standardized by intercomparison with those observed at Alibag, using a set o QHM and BMZ as touring standards.

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ANDOYA

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ITEM: 19

DATE:05/05/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 69.29
STATION LONGITUDE ----------	E 16.02
ALTERNATE NAMES ----------	Oksebasen
DATES OF OPERATION ----------	01/1972 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	3 component Fluxgate Magnetometer. Operation on a 24 h basis. Paper chart speed 60 mm/h.
RAW DATA ----------	Paper chart
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Paper
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Andoya Rocket Range NTNF, Space Activity Division Wdm. Thranegt. 98 Oslo Norway 1
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	1 component magnetometer used from 06/1965 to 12/1971. Special purpose data available after 1 day.

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D01 Geomagnetic Standard a

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ITEM: 786
DATE: 00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 67.55
STATION LONGITUDE	E 33.30
ALTERNATE NAMES	
DATES OF OPERATION	01/1973 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard Magnetometer
RAW DATA	Photorecorded graphics
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Microfilm tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Michail I. Pudovkin Dept of Terrestrial Physics, Phys Inst Leningrad State University Leningrad USSR 199 164
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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and Rapid Run Measurements (Cont.)

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APIA
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ITEM: 23
DATE:12/08/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	S 13.80
STATION LONGITUDE ----------	E 188.22
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	06/1902 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour Magnetometer - 2 magnetic recordings for H, D, and Z elements with the La Cour Magnetometer. Normal recording made at a drum speed of 15 mm/h and 180 mm/h for the rapid run recorder. Baseline controlling absolute observations taken twice a week with Askania Delinometer. Elsec Proton Magnetometer and Earth Inductor. The QHM is used periodically for instrument comparison.
RAW DATA ----------	Photographic paper, table, computer printouts
DATA REDUCTION PRACTICE ----------	Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Photographic paper, tables, computer printouts
DATA ROUTINELY PUBLISHED ----------	APIA OBSERVATORY, APIA, W SAMOA MAGNETIC RESULTS, available from New Zealand D.S.I.R. Geophysics Div., J. GEOPHYSICAL RESEARCH, WDC-A
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	The Superintendent Apia Observatory P.O. Box 52 Apia Western Samoa
ADDRESS FOR INFORMATION ABOUT DATA --------	The Officer-in-Charge, Magnetic Surv Geophysical Observatory P.O. Box 2111 Christchurch New Zealand
ADDITIONAL COMMENTS -----	Special purpose data available after 1 month. All data available from the Geophysical Observatory, P.O. Box 2111, Christchurch, New Zealand.

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D01 Geomagnetic Standard an

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ARCTIC VILLAGE
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ITEM: 25
DATE:05/06/75 3d

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 68.13
STATION LONGITUDE	E 214.43
ALTERNATE NAMES	
DATES OF OPERATION	03/1973 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Forester Hoover Fluxgate Magnetometer, continuous recording on 4 inch/h strip chart.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Archives Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of the University of Alaska North-South meridian chain through Fairbanks.

and Rapid Run Measurements (Cont.)

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ARGENTINE ISLANDS
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ITEM: 28
DATE:20/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 65.25
STATION LONGITUDE	E 295.73
ALTERNATE NAMES	
DATES OF OPERATION	05/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour and EDA Fluxgate Magnetometers, continuous recording of 3 components of the magnetic field. 2 La Cour sets, sensitivities about 4 gamma/mm and 12 gamma/mm, chart speed 15 mm/h. From 3/1974, EDA fluxgate magnetometer recording H, D, Z, sensitivity about 15 gamma/mm switching automatically to 30 gamma/mm in large storms, chart speed 20 mm/h.
RAW DATA	Photographic paper (La Cour), Strip chart (Fluxgate)
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	15 MONTHS
FORM OF REDUCED DATA	Computer printout, magnetic tape, microfilm
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
	Denmark, Japan
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	W. M. Sievwright British Antarctic Survey Drummond Street Edinburgh Scotland EH8 9UA
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Control by QHM, BMZ, fibre declinometer and PPM. Reduced data -- mean hourly value on computer printout and magnetic tape, microfilm of original records, K indices. Special purpose reduction of K indices usually available after 1 month.

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ASHKHABAD
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ITEM: 848
DATE:00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 37.90
STATION LONGITUDE	E 58.40
ALTERNATE NAMES	
DATES OF OPERATION	09/1958 to present
OBSERVING SCHEDULE	Occasional

K indices usually available after 1 month.

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ASHKHABAD
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ITEM: 848
DATE:00/00/75

46

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 37.90
STATION LONGITUDE ---------- E 58.40
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1958 to present
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ------ Standard and rapid run magnetometers
RAW DATA ---------- Analog magnetic tape
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. V. G. Dubrovskij
Inst Phys Earth & Atm, Turkmen Acad Sci
Gogol Street 16
Ashkhabad
USSR 744019

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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D01 Geomagnetic Standard an

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ITEM: 45
DATE:03/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 16.41
STATION LONGITUDE	E 120.58
ALTERNATE NAMES	Manila
DATES OF OPERATION	05/1960 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Askania geomagnetic variograph with QHM. Routine continuous 24-hour observations. Photographic recording, change once a day at 0800 LT, 0.44 min/mm.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	The Director Manila Observatory P.O. Box 1231 Manila Philippines
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ɲnetic Standard and Rapid Run Measurements (Cont.)

ITEM: 45
DATE:03/06/75 4C

id Run Measurements

aph with QHM. Routine
ions. Photographic
y at 0800 LT,

paper

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BAKER LAKE
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DISCIPLINE ----------	D01 Geomag Standard and R
STATION LATITUDE ----------	N 64.33
STATION LONGITUDE ----------	E 263.97
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	03/1951 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	AMOS(Automatic Magnetic O tinuous recording of earth (north), Y(east), Z(verti of field recorded once/mi tape, with an analogue ou 20 mm/h. Absolute observ and I(inclination) and of made once or twice a week
RAW DATA ----------	Digital ma
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	18
FORM OF REDUCED DATA ----------	Digital ma microfilm
DATA ROUTINELY PUBLISHED ----------	Annual rep Physics Br parameters summary.
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Div. of Ge Dept. of E 1 Observat Ottawa Canada
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as ab
ADDITIONAL COMMENTS -----	Standard run 3 component Rus able fluxgate magnetometer f observations. Proton proces observations. Digital recor Special purpose data availab

one chart and D separately at paper speed of 15 mm/h. Hourly mean values of D and Z are reported from La Cour records instead of Watson records from 1949 to 1972. Watson H mean values given.

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ments (Cont.)

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ITEM: 46
DATE:02/06/75

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--- DØ1 Geomag Standard and Rapid Run Measurements
--- N 64.33
--- E 263.97

--- Ø3/1951 to present
--- Regular
--- AMOS(Automatic Magnetic Observatory System), continuous recording of earths magnetic field. X (north), Y(east), Z(vertical), F(total intensity) of field recorded once/min on digital magnetic tape, with an analogue output on strip chart at 20 mm/h. Absolute observation of D(declination) and I(inclination) and of total intensity F are made once or twice a week.

---------- Digital magnetic tape, strip chart
---------- Regular , Special
LABLE AFTER ------ 18 MONTHS
---------- Digital magnetic tape, tables, microfilm
---------- Annual report available from Earth Physics Branch contains instrument parameters, mean hourly value summary.
---------- Yes

---------- Yes
BOUT STATION ----- Div. of Geomagnetism, Earth Physics Br.
Dept. of Energy, Mines & Resources
1 Observatory Cres.
Ottawa Ontario
Canada KIAOY3

BOUT DATA -------- Same as above

Standard run 3 component Ruska magnetograph. Portable fluxgate magnetometer for absolute D. I. observations. Proton precession magnetometer for F observations. Digital recording commenced 11/1971. Special purpose data available after 2 months.

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D01 Geomagnetic Standard ar

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ITEM: 48
DATE:05/03/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 4.44
STATION LONGITUDE ----------	E 18.56
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	02/1952 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour Magnetometer, standard measurements of daily geomagnetic variations, 3 components, 2 entire La Cour magnetometers, speed run 15 mm/h, scale values H 2.2 gamma/mm, D 0.60 gamma/mm, Z 2.2 gamma/mm, and H 3.8 gamma/mm, D 0.40 gamma/mm, Z 2.6 gamma/mm. Weekly absolute measurements with vector magnetometer for H (Nelson) and Z(Serson), Channeltron for D component. Weekly scale value determination.
RAW DATA ----------	Photographic paper
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Microfilm, monthly tables (hourly values), K character
DATA ROUTINELY PUBLISHED ----------	Bulletin Magnetique de l observatoire de Bangui, available on request
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Observatoire Geophysique Centre O.R.S.T.O.M. de Bangui B.P. 893 Bangui Central African Rep
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

nd Rapid Run Measurements (Cont.)

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BARROW
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ITEM: 49
DATE:12/02/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 71.30
STATION LONGITUDE ---------- E 203.25
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 10/1949 to present
Station moved
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- Standard Magnetometer
RAW DATA ---------- Photorecorded graphics, digital magnetic tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 8 MONTHS
FORM OF REDUCED DATA ---------- Tables, digital magnetic tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Arthur W. Green
Theoretical and Applied Geophysics, US
Denver Federal Center
Denver CO
USA 80225

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data prior to 04/1975 available at WDC-A. Data subsequent to 04/1975 will be made available to WDC-A in early 1976. Tables of hourly values, hourly and 2.5 min values on mag tape and copies of magnetograms are available from WDC-A. Data subsequent to 4/1975 will all be digital data on mag tape.

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BEAR ISLAND
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ITEM: 50
DATE:26/01/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 74.51
STATION LONGITUDE ---------- E 19.02
ALTERNATE NAMES ---------- Bjornoya
DATES OF OPERATION ---------- 07/1948 to present
8/1968 station moved 50m
6/1968-9/1968 no operation
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- La Cour magnetometer, 15 mm/h, medium sensitivity 10 gamma/mm, absolute measurements once/year.
RAW DATA ---------- Photographic paper

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BEAR ISLAND

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ITEM: 50
DATE:26/01/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 74.51
STATION LONGITUDE ---------- E 19.02
ALTERNATE NAMES ---------- Bjornoya
DATES OF OPERATION ---------- 07/1948 to present
8/1968 station moved 50m
6/1968-9/1968 no operation
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- La Cour magnetometer, 15 mm/h, medium sensitivity
10 gamma/mm, absolute measurements once/year.
RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Microfilm, annual quiet means
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Copenhagen
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Asgeir Brekke
The Auroral Observatory
P.O. Box 953
Tromso
Norway N 9001

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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D01 Geomagnetic Standard a

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BINZA
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ITEM: 61
DATE:12/05/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	S 4.37
STATION LONGITUDE ----------	E 15.25
ALTERNATE NAMES ----------	Kinshasa
DATES OF OPERATION ----------	07/1952 to present 1-2/1967 operation intermittent
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour Magnetometer, 3x3 BMZ and 3x3 QHM regularly per week. 2xH (Ruska magnetometer) per month, 2xI (Askania magnetometer) per month, 2xD (Schmidt Theodolite) per month. Chart speed 15mm/h.
RAW DATA ----------	Photographic paper, tables
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	12 MONTHS
FORM OF REDUCED DATA ----------	Tables, films (on request)
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Binza Geophysical Observatory Service Meteorologique du Zaire Binza Kinshasa Zaire
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Reductions of observations for special purpose are usually available after 3 months.

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BOROK
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ITEM: 856
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements

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and Rapid Run Measurements (Cont.)

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BOULDER
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ITEM: 68
DATE:12/02/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 40.13
STATION LONGITUDE ----------	E 254.77
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	03/1963 to present
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION -----	Standard Magnetometer
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	WDC-A furnishes hourly value tables, hourly values and some 2.5 minute values on magnetic tape and copies of magnetograms.
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Arthur W. Green Theoretical and Applied Geophysics, Denver Federal Center Denver CO USA 80225
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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BUDKOV
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ITEM: 819
DATE:00/00/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 49.07
STATION LONGITUDE ----------	E 14.02
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1958 to present

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Reductions of observations for special purpose ar
usually available after 3 months.

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BOROK
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ITEM: 856
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 58.02
STATION LONGITUDE ---------- E 38.20
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 08/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Standard and rapid run magnetometers
RAW DATA ---------- Photorecorded graphics
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- 35 mm microfilm of graphics
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. A. N. Zaitsev
IZMIRAN
P/O Akademgorodok
Moscow
USSR

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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BUDKOV
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ITEM: 819
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 49.07
STATION LONGITUDE ---------- E 14.02
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1958 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Standard Magnetometer, Earth currents
RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER -------- MONTHS
FORM OF REDUCED DATA ---------- Microfilm
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. K. Dobes
Geophysical Inst, Czechoslovak Acad Sc
Bocni II
Prague
Czechoslovakia 141 31

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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D01 Geomagnetic Standard a

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CACHOEIRA PAULISTA
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ITEM: 535
DATE:11/07/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 22.88
STATION LONGITUDE	E 314.61
ALTERNATE NAMES	San Jose
DATES OF OPERATION	08/1975 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Automatic Standard Magnetic Observatory (ASMO). F, H, Z, I and D. A cesium vapor magnetometer (ASMO system of Varian) recording F, I, and D. The analog record is on a chart paper run at 2 inch/h and digital recording is done on a 7-track magnetic tape. The system is set to record continuously six data cycles per minute.
RAW DATA	Strip chart, tables, digital magnetic tape, computer printouts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts, graphical plots
DATA ROUTINELY PUBLISHED	Data will be published in the ASTRO-GEOPHYSICS BULLETIN of INPE by the end of 1975; tables of hourly mean values and graphical plots of the daily variation
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Inst Nacional de Pesquisas Espaciais Av. dos Astronautas, 1758 Sao Jose dos Campos Sao Paulo Brasil 12.200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The instrument was operated in Sao Jose dos Campos, Sao Paulo, Brasil (S23.22 W45.85) from January to December 1970. However, the data presents many gaps due to troubles in the electronics. Special purpose data usually available after 3 months.

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gnetic Standard and Rapid Run Measurements (Cont.)

ITEM: 535
DATE:11/07/75

pid Run Measurements

c Observatory (ASMO).
n vapor magnetometer
cording F, I, and D.
chart paper run at 2
ng is done on a
e system is set to re-
cycles per minute.
, tables, digital mag-
computer printouts
Special
ONTHS
puter printouts, graph-

e published in the
YSICS BULLETIN of
end of 1975; tables
ean values and graph-
of the daily varia-

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Sao Paulo
12.200

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Sao Jose dos Campos,
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lata presents many
ectronics. Special
after 3 months.

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CAMBRIDGE BAY
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DISCIPLINE ----------	D01 Geomag Standard and R
STATION LATITUDE ----------	N 69.10
STATION LONGITUDE ----------	E 255.00
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1972 to present
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION -----	AMOS (Automatic Magnetic Digital recording of earth X(north), Y(east), Z(Vert sity) of field recorded o tape with analog output o mm/h. Absolute observati and I(inclination) and of made once a week.
RAW DATA ----------	Digital ma
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	18
FORM OF REDUCED DATA ----------	Digital ma microfilm
DATA ROUTINELY PUBLISHED ----------	Annual rep Physics Br parameters summary.
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Div. of Ge Dept. of E 1 Observat Ottawa Canada
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as ab
ADDITIONAL COMMENTS -----	3 component recording fluxga storm recorder. Pen and ink Portable fluxgate magnetomet observations. Proton precess F observations. Special pur available after 2 months.

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surements (Cont.)

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ITEM: 78
DATE:02/06/75

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-------- D01 Geomag Standard and Rapid Run Measurements
-------- N 69.10
-------- E 255.00

-------- 04/1972 to present

ON ----- AMOS (Automatic Magnetic Observatory System). Digital recording of earths magnetic field. X(north), Y(east), Z(Vertical), F(total intensity) of field recorded once/min on digital mag. tape with analog output on strip chart at 20 mm/h. Absolute observations of D(declination) and I(inclination) and of total intensity F are made once a week.

---------- Digital magnetic tape, strip chart
ICE ---------- *Regular , Special*
AVAILABLE AFTER ------ 18 MONTHS
---------- Digital magnetic tape, tables, microfilm
SHED ---------- Annual report available from Earth Physics Branch contains instrument parameters, mean hourly value summary.
---------- Yes

QUEST ---------- Yes
ION ABOUT STATION ----- Div. of Geomag., Earth Physics Branch
Dept. of Energy, Mines & Resources
1 Observatory Cres.
Ottawa Ontario
Canada KIA 0Y3

ION ABOUT DATA -------- Same as above
----- 3 component recording fluxgate serves as standby and storm recorder. Pen and ink charts are at 20 mm/h. Portable fluxgate magnetometer for absolute D.I. observations. Proton precession magnetometer for F observations. Special purpose data usually available after 2 months.

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301

D01 Geomagnetic Standard a

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CANBERRA
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ITEM: 85
DATE:31/03/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 35.31
STATION LONGITUDE ---------- E 149.00
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Askania H-magnetograph (IGY type). H-magnetograms. Askania visual H-magnetograph (reference: Haalok, F, DER H-MAGNETOGRAPH ALS ALARMEINRICHTUNG FUR MAGNETISCHE STURME. Chart speed 20mm/h, continuous recording.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Officer in Charge
Canberra Ionospheric Station
Mount Stromlo
Wodon A.C.T.
Australia 2606

ADDRESS FOR INFORMATION ABOUT DATA -------- Disturbance Warning Section
Ionospheric Prediction Serv, Dept Sci
P.O. Box 702
Darlinghurst N.S.W.
Australia 2010

ADDITIONAL COMMENTS ----- Used only as geomagnetic field monitor for disturbance warning purposes.

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CANBERRA
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ITEM: 86
DATE:21/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 35.29

d and Rapid Run Measurements (Cont.)

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CASEY
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ITEM: 91
DATE:06/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 66.54
STATION LONGITUDE	E 110.36
ALTERNATE NAMES	REPSTAT
DATES OF OPERATION	05/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Fluxgate Magnetometers. Magnetic field variation. Instrument is a 3 component fluxgate magnetometer. Sensitivity of record is about 300 gamma/cm. Chart speed is 2 cm/h, running continuously. Output is inspected daily but scaled only on return to Australia.
RAW DATA	Paper chart
DATA REDUCTION PRACTICE	Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Casey Station Antarctic Division 568 St. Kilda Road Melbourne Victoria Australia Vic. 3004
ADDRESS FOR INFORMATION ABOUT DATA	Director Antarctic Division 568 St. Kilda Road Melbourne Victoria Australia Vic. 3004
ADDITIONAL COMMENTS	Casey records exist from 1969 to the present for Y and Z components. To establish a baeline for the fluxgate components QHM and BMZ instruments are being used at present. Once the baseline is established, the Casey observations will be tied to the Wilkes Observatory (S66.26 E110.52). Information about the Wilkes operation and details of the present instrument can be had from: The Bureau of Mineral Resources, 460 Bourke St., Melbourne, Vic. 3000, Australia.

Darlinghurst N.S.W.
Australia 2010

ADDITIONAL COMMENTS ----- Used only as geomagnetic field monitor for disturbance warning purposes.

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CANBERRA
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ITEM: 86
DATE:21/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 35.29
STATION LONGITUDE ---------- E 149.30
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1973 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- ELSEC Automatic Magnetic Observatory, 1 min digital 3 component readings. Continuous digital recording, weekly control observations.
RAW DATA ---------- Paper tape, digital magnetic tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 6 MONTHS
FORM OF REDUCED DATA ---------- Magnetic tape, computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Geophysical Observatory Group
Bureau of Mineral Resources
P.O. Box 378
Canberra City
Australia 2601

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

UNCLASSIFIED AFGL-TR-77-0255 NL

9 OF 13
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D01 Geomagnetic Standard a

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CASTLE ROCK
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ITEM: 95
DATE:12/02/76 8a

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 37.23
STATION LONGITUDE ----------	E 237.87
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1970 to present
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION -----	Standard magnetometer
RAW DATA ----------	Photorecorded graphics, mag tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Photorecorded graphics, mag tape
DATA ROUTINELY PUBLISHED ----------	WDC-A furnishes hourly value tables, hourly and 2.5 min values on magnetic tape
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Arthur W. Green Theoretical and Applied Geophysics, USG Denver Federal Center Denver CO USA 80225
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data reduced regularly 10/1970-3/1975. Data since 3/1975 expected to be reduced in early 1976. Experimental operations began 1/1963.

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CHICHIJIMA
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ITEM: 108
DATE:23/06/75

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Standard and Rapid Run Measurements (Cont.)

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12/02/76 8a

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Data since
1976. Exper-

108
23/06/75

easurements

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15 mm/h
film

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DISCIPLINE	D01 Geomag Standard and Rapid Run
STATION LATITUDE	N 64.87
STATION LONGITUDE	E 212.17
ALTERNATE NAMES	
DATES OF OPERATION	07/1941 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Normal Magnetograph. Continuous cords changed daily. Photo paper mm/h on 19x53 cm record. Absolut weekly or semi-weekly with a prot tometer and a Ruska suspension ma D. Variometers are La Cour suspe & D, vertical balance type for Z. available in tables and on magnet 2.5 min digitized values.
RAW DATA	Photo paper record mm scalings
DATA REDUCTION PRACTICE	Regular , Spec
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, photo pape tapes, microfilm
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	John D. Wood USGS, Theoretical Denver Federal Cen Denver CO USA
ADDRESS FOR INFORMATION ABOUT DATA	William Paulishak WDC-A for Solar-Te c/o NOAA-EDS Boulder CO USA
ADDITIONAL COMMENTS	Special purpose observations are usu after 1 month. Preliminary Data Rep monthly at the observatory. Operati by Univ of Alaska. 02/1948 operatio to this agency and the variations re moved several hundred meters. A pro system digitally recording variation F was installed in late 1974. This place the magnetograph as the primar tem for the observatory.

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surements (Cont.)

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ITEM: 118
DATE:17/04/75

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-------- D01 Geomag Standard and Rapid Run Measurements
-------- N 64.87
-------- E 212.17

-------- 07/1941 to present
-------- Regular
ION ----- Normal Magnetograph. Continuous recording, records changed daily. Photo paper recording 20 mm/h on 19x53 cm record. Absolutes are made weekly or semi-weekly with a proton vector magnetometer and a Ruska suspension magnetometer for D. Variometers are La Cour suspension type for H & D, vertical balance type for Z. Hourly values available in tables and on magnetic tape, also 2.5 min digitized values.
---------- Photo paper recordings, tabular mm scalings
TICE ---------- Regular , Special
A AVAILABLE AFTER ------ 2 MONTHS
A ---------- Tables, photo paper, magnetic tapes, microfilm
ISHED ----------
---------- Yes

EQUEST ---------- Yes
TION ABOUT STATION ----- John D. Wood
USGS, Theoretical & Applied Geophysics
Denver Federal Center, Bldg. 25
Denver CO
USA 80225

TION ABOUT DATA -------- William Paulishak
WDC-A for Solar-Terrestrial Physics
c/o NOAA-EDS
Boulder CO
USA 80302

----- Special purpose observations are usually available after 1 month. Preliminary Data Report published monthly at the observatory. Operations began 1941 by Univ of Alaska. 02/1948 operations transferred to this agency and the variations recording site moved several hundred meters. A proton-fluxgate system digitally recording variations in D, H, Z and F was installed in late 1974. This system will replace the magnetograph as the primary recording system for the observatory.

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CHICHIJIMA
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ITEM: 108
DATE:23/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 27.09
STATION LONGITUDE ---------- E 142.18
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 02/1973 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Fluxgate magnetometer: 3 component (D,H,Z) continuous observation, 2.5 gamma/mm, 15 mm/h
RAW DATA ---------- Strip chart, scratch film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- K. Yanagihara, Director
Kakioka Magnetic Observatory
Kakioka 595
Yasato-machi Ibaraki-ken
Japan 315-01

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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303

D01 Geomagnetic Standard a

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COLLEGE
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ITEM: 119
DATE:05/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 64.86
STATION LONGITUDE ---------- E 212.15
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1971 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Earth currents, electric potential between 2 buried lead plates approximately 100 meters apart is measured continuously and recorded on strip chart at 3 inch/h. 2 pairs of electrodes are oriented in magnetic N-S and E-W. Also recorded on direct tape at 1 inch/h and 24 inch/h.
RAW DATA ---------- Strip chart, analog magnetic tape
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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etic Standard and Rapid Run Measurements (Cont.)

ITEM: 119
DATE:05/06/75

Run Measurements

tial between 2
ly 100 meters apart
ecorded on strip
electrodes are
-W. Also recorded
24 inch/h.
alog magnetic tape

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COLLEGE
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DISCIPLINE ----------	D01 Geomag Standard and Rapi
STATION LATITUDE ----------	N 18.20
STATION LONGITUDE ----------	E 293.85
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Ruska rapid run magnetograph changed daily, photo paper r Each component on separate 3 Variometers are Ruska suspen balance type for Z. Weekly, determined with Proton Vecto Ruska suspension magnetomete
RAW DATA ----------	Photo paper r
DATA REDUCTION PRACTICE ----------	Regular ,
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MON
FORM OF REDUCED DATA ----------	Photo copies, original reco
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	John D. Wood USGS Theoreti Denver Federa Denver USA
ADDRESS FOR INFORMATION ABOUT DATA --------	William Pauli WDC-A for Sol NOAA/EDS Boulder USA
ADDITIONAL COMMENTS -----	This magnetograph is being repl fluxgate system recording varia Special purpose data are usuall month. Data are available on r reproduction.

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surements (Cont.)

********** ITEM: 205
DATE:14/04/75
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-------- D01 Geomag Standard and Rapid Run Measurements
-------- N 18.20
-------- E 293.85

-------- 07/1957 to present
-------- Regular
ON ----- Ruska rapid run magnetograph, continuous, records changed daily, photo paper recording @ 4 mm/min. Each component on separate 30 cm x 50 cm record. Variometers are Ruska suspension for H and D, balance type for Z. Weekly, bi-weekly baselines determined with Proton Vector Magnetometer and Ruska suspension magnetometer for D.
---------- Photo paper records
ICE ---------- Regular , Special
AVAILABLE AFTER ------ 2 MONTHS
---------- Photo copies, microfilm copies of original records
SHED ----------
---------- Yes

QUEST ---------- Yes
ION ABOUT STATION ----- John D. Wood
USGS Theoretical & Applied Geophysics
Denver Federal Center, Bldg 25
Denver CO
USA 80225

ION ABOUT DATA -------- William Paulishak
WDC-A for Solar Terrestrial Physics
NOAA/EDS
Boulder CO
USA 80302

----- This magnetograph is being replaced by a proton fluxgate system recording variations in D,H,Z,F. Special purpose data are usually available after 1 month. Data are available on request at cost of reproduction.

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D01 Geomagnetic Standard a

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COPENHAGEN
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ITEM: 783
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 55.85
STATION LONGITUDE ---------- E 12.45
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1907 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Standard Magnetometer
RAW DATA ---------- Photorecorded graphics
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Photorecorded graphics
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Asger Lundbak
Geophys Sec I, Det Danske Met Institut
Lyngbyvej 100
Kobenhavn
Denmark DK-2100

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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DAR ES SALAAM
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ITEM: 133
DATE:26/02/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 6.77

and Rapid Run Measurements (Cont.)

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DAVAO
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ITEM: 134
DATE:03/06/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 7.08
STATION LONGITUDE ----------	E 125.58
ALTERNATE NAMES ----------	Manila
DATES OF OPERATION ---------	02/1965 to present
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Askania Geomagnetic Variograph with QHM and magnetic inductor. Routine station type observations. Photographic recording, change at 0800 LT, continuous 24 h run, 0.44 min/mm.
RAW DATA ----------	Photographic paper
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	The Director Manila Observatory P. O. Box 1231 Manila Philippines
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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DAVIS
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ITEM: 138
DATE:06/06/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	S 68.58
STATION LONGITUDE ----------	E 77.96
ALTERNATE NAMES ----------	
DATES OF OPERATION ---------	1969 to present (H) 03/1972 to present (H & D)
OBSERVING SCHEDULE ---------	Regular

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DAR ES SALAAM
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ITEM: 133
DATE: 26/02/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 6.77
STATION LONGITUDE ---------- E 39.22
ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 08/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- IZMIRAN IV 3-component magnetovariometer. Variations in H, Z, and D. Chart speed 20 mm/h, one chart/day on photographic paper. Sensitivity: H; 2 gamma/mm; Z: 1 gamma/mm; D: 1 gamma/mm.

RAW DATA ---------- Daily strip charts 50x20 cm
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Tables of mean hourly values
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. R. Grosskreutz
Physics Dept., Univ. of Dar es Salaam
Box 35063 DS17
Tanzania

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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DAVIS
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ITEM: 138
DATE:06/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 68.58
STATION LONGITUDE ---------- E 77.96
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 1969 to present (H)
03/1972 to present (H & D)
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Fluxgate Magnetometer. Transistor/Discrete ccts. Sensors are in oven on rocky surface about 50 meters from hut. Chart speed 2 cm/h, 400 gamma/inch.
RAW DATA ---------- Strip chart (10 inches wide)
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Director
Antarctic Div., Dept. of Science
568 St. Kilda Road
Melbourne Victoria
Australia 3004

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

D01 Geomagnetic Standard ar

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ITEM: 151
DATE:13/03/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 62.07
STATION LONGITUDE ---------- E 9.12
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1916 to present
03/1951 station moved
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- La Cour Magnetometer. H, D, & Z La Cour Magnetometers, La Cour regristrator, 24 h magnetograms, short speed 15 mm/h. Absolute observations: QHM and BMZ and Askania Declinometer, regularly 1/ month. Scale value measurements a few times a year.

RAW DATA ---------- Photogarphic paper, microfilm
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer printouts
DATA ROUTINELY PUBLISHED ---------- The magnetic station at Dombas, Observations; on exchange basis; absolute hourly mean values.

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Geophysical Inst., Dept. of Geomagnetism
University of Bergen
Allegt. 70
Bergen - Univ.
Norway N-5014

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Absolute values available after 2 years, relative values after 1 year. Old coordinates of station: N62.08 E09.10. Auxiliary equipment: Geometrics G 826 protonmagnetometer in operation since 06/1975. Participation in organized network: 105 Geomagnetic meridian.

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DOURBES
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ITEM: 824
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements

d and Rapid Run Measurements (Cont.)

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ITEM: 626
DATE:06/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 40.82
STATION LONGITUDE	E .49
ALTERNATE NAMES	Tortosa
DATES OF OPERATION	01/1905 to present
	Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour, normal and rapid run measurements
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables, not published since 194
DATA ROUTINELY PUBLISHED	Boletin del Observatorio del Eb
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes
	Copenhagen, Tortosa
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Observatorio del Ebro
	Roquetas Tarragona
	Spain
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Gap 1936-1942, 1905-1936 Mancart H,Z,D; 1942-1958 Mancart H,Z,D; 1953-present La Cour H,Z,D; 2nd Polar year and 1942-present La Cour rapid run

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EIELSON AFB
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ITEM: 1107
DATE:14/01/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 64.70
STATION LONGITUDE	E 213.00
ALTERNATE NAMES	
DATES OF OPERATION	09/1966 to present
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	Magnetic field measurements
RAW DATA	Photorecorded graphics
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	

Participation in organized network: 105 Geomagn
meridian.

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DOURBES
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ITEM: 824
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 50.10
STATION LONGITUDE ---------- E 4.60
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1928 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Magnetic Field Measurements
RAW DATA ---------- Magnetic tape, tables
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Magnetic tape, tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. A. De Vuyst
Institut Royal Meteorologique
Centre de Physique du Globe
Dourbes
Belgium 6381

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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ADDITIONAL COMMENTS ----- Gap 1936-1942, 1905-1936 Mancart H,Z,D; 1942-1958 Mancart H,Z,D; 1953-present La Cour H,Z,D; 2nd Polar year and 1942-present La Cour rapid run.

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EIELSON AFB

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ITEM: 1107
DATE:14/01/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements	
STATION LATITUDE ----------	N	64.70
STATION LONGITUDE ----------	E	213.00
ALTERNATE NAMES ----------		
DATES OF OPERATION ----------	09/1966 to present	
OBSERVING SCHEDULE ----------		
INSTRUMENT DESCRIPTION -----	Magnetic field measurements	
RAW DATA ----------	Photorecorded graphics	
DATA REDUCTION PRACTICE ----------	None	
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS	
FORM OF REDUCED DATA ----------		
DATA ROUTINELY PUBLISHED ----------		
DATA SENT TO WDC-A ----------	Yes	
DATA SENT TO WDC-B ----------		
DATA SENT TO WDC-C ----------		
DATA AVAILABLE ON REQUEST ----------		
ADDRESS FOR INFORMATION ABOUT STATION -----	Col. Dale J. Flinders Hq AWS/DN Headquarters Air Weather Service Stott AFB IL USA 62225	
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above	
ADDITIONAL COMMENTS -----		

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D01 Geomagnetic Standard

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ITEM: 165
DATE:29/04/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 55.32
STATION LONGITUDE ----------	E 356.80
ALTERNATE NAMES ----------	
DATES OF OPERATION ---------	1908 to present
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	La Cour magnetometer and Rubidium magnetometer, suspended or balanced magnets, D, H, Z continuous recording 15 mm/h. Plus 3 Rubidium sensor backing-off coils, D, H, Z, 2 samples/min onto magnetic tape.
RAW DATA ----------	Microfilm, photo paper, digital magnetic tape
DATA REDUCTION PRACTICE ----------	Regular ,
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Tables, magnetic tape
DATA ROUTINELY PUBLISHED ----------	GEOMAGNETIC BULLETIN, typical annual volume
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Director Institute of Geological Sciences Herstmonceux Castle Hailsham Sussex UK BN27 1RP
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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rd and Rapid Run Measurements (Cont.)

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ESKIMO POINT
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ITEM: 168
DATE:09/02/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE ---------- N 61.10
STATION LONGITUDE ---------- E 265.93
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1972 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- EDA Fluxgate magnetometer and YEW scratch rec
der. The magnetic variations are recorded on
mm film but no absolute measurements are take
The speed is 72 mm/h and the scale value is 4
nT/m when the microfilm is blown up to 12 tim
RAW DATA ---------- 35 mm YEW scratch film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- *35mm microfilm*
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. J. K. Walker
Earth Physics Branch, EMR
1 Observatory Cresent
Ottawa Ontario
Canada KIA OY3

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- The station is part of a meridian chain through
Churchill.

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D01 Geomagnetic Standard ar

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ITEM: 171
DATE:08/07/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 3.88
STATION LONGITUDE	E 321.57
ALTERNATE NAMES	
DATES OF OPERATION	04/1975 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Total field intensity. Varians rubidium (magnetometer) sensor and sensor coupler plus Hewlett Packards frequency counter, digital analog converter and strip chart recorder; continuous recording at 6 inch/h and 214 gammas full scale.
RAW DATA	Strip chart, tables
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1.5 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots, computer printouts
DATA ROUTINELY PUBLISHED	Data will be published in the Astro-Geophysics Bulletin of INPE by the end of 1975; tables of hourly mean values and graphical plots of the daily variation
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Inst Nacional de Pesquisas Espaciais Av. dos Astronautas, 1758 Sao Jose dos CaSao Paulo Brazil 12.200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose observations are usually available after two months. The instrument operated in Sao Jose dos Campos, Sao Paulo, Brasil (S23.22 E314.15) 12/1971-12/1974. However, there are many gaps due to tracibles with the electronics & recording unit.

and Rapid Run Measurements (Cont.)

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FORT CHURCHILL
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ITEM: 115
DATE:02/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 58.80
STATION LONGITUDE	E 265.90
ALTERNATE NAMES	Churchill
DATES OF OPERATION	03/1951 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	AMOS (Automatic Magnetic Observatory System). Continuous recording of earths magnetic field. X(North), Y(east), Z(vertical) F(total intensity) of field recorded once/min on digital magnetic tape, with an analogue output on strip chart at 20 mm/h. Absolute observation of D(declination) and I(inclination) and of total intensity F are made once or twice a week.
RAW DATA	Digital magnetic tape, strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Digital magnetic tape, tables, microfilm
DATA ROUTINELY PUBLISHED	parameters, mean hourly value summary Annual report available from Earth Physics Branch contains instrument parameters, mean hourly value summary.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Div. of Geomag., Earth Physics Bra Dept. of Energy, Mines & Resources 1 Observatory Cres. Ottawa Ontario Canada KIA 0Y3
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose observations are usually available after 2 months. Standard run 3 component Ruska magnetograph. Portable fluxgate magnetometer for absolute D. I. observations. Digital recording commenced 09/1971. Proton recession magnetometer for F observations.

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D01 Geomagnetic Standard a

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FORT SMITH
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ITEM: 174
DATE:21/03/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements

STATION LATITUDE ---------- N 60.00
STATION LONGITUDE ---------- E 248.00
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 08/1971 to present

OBSERVING SCHEDULE ---------
INSTRUMENT DESCRIPTION ----- Fluxgate magnetometer, magnetic field variations. Range: plus or minus 1000 nT; sensitivity: plus or minus 1 nT; sample rate 1 component/2 s; coordinate system (H, D, Z); timing accuracy plus or minus 0.1s; Frequency range 0-0.3 Hz.

RAW DATA ----------
Digital magnetic tape
DATA REDUCTION PRACTICE ---------- , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Gordon Rostoker
Inst. of Earth and Planetary Physics
Universyty of Alberta
Edmonton Alberta
Canada T6G 2E1

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data usually available after 3 months. Occasional All-sky Camera coverage at Fort Smith in Winter 1971-72 and Fall 1974.

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FORT YUKON
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ITEM: 177
DATE:10/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 66.56
STATION LONGITUDE ---------- E 214.78

tic Standard and Rapid Run Measurements (Cont.)

EM: 174
TE:21/03/75

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M: 177
E:10/06/75

Measurements

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FREDERICKSBURG
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DISCIPLINE ----------	D01 Geomag Standard and Rapid
STATION LATITUDE ----------	N 38.20
STATION LONGITUDE ----------	E 282.63
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1956 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Normal Ruska Magnetograph. C records changed daily. Photo 20 mm/h on 19 cm X 53 cm reco Ruska suspensions for D & H, Z. Absolutes taken weekly an Sine Galvanometer, Proton Vec Ruska suspension magnetometer ing modified to utilize La Co
RAW DATA ----------	Photo paper re mm scalings in
DATA REDUCTION PRACTICE ----------	Regular ,
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONT
FORM OF REDUCED DATA ----------	Photo copies, lar form, micr
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	John D. Wood USGS, Theoreti Denver Federal Denver USA
ADDRESS FOR INFORMATION ABOUT DATA --------	William Paulis WDC-A for Sola c/o NOAA-EDS Boulder USA

ADDITIONAL COMMENTS ----- Magnetograph system may be repla 1975-76 with a proton fluxgate s iations in D, H, Z, & F digitall In 1956, Fredericksburg replaced servatory which was located 75 k site. Cheltenham coordinates N3 cial purpose data usually availa Regular data are photo copies of values on mag tape and in tabula digitized values for some interv

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rements (Cont.)

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ITEM: 180
DATE:17/04/75

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----- D01 Geomag Standard and Rapid Run Measurements
----- N 38.20
----- E 282.63

----- 01/1956 to present
----- Regular
----- Normal Ruska Magnetograph. Continuous recording, records changed daily. Photo paper recording @ 20 mm/h on 19 cm X 53 cm record. Variometers are Ruska suspensions for D & H, modified La Cour for Z. Absolutes taken weekly and semi-weekly with Sine Galvanometer, Proton Vector Magnetometer and Ruska suspension magnetometer for D. Ruska housing modified to utilize La Cour magnet.

---------- Photo paper records and copies, mm scalings in tabular form
---------- Regular , Special
AILABLE AFTER ------ 2 MONTHS
---------- Photo copies, magnetic tape, tabular form, microfilm

D ----------
---------- Yes

ST ---------- Yes
ABOUT STATION ----- John D. Wood
USGS, Theoretical and Applied Geophysics
Denver Federal Center, Bldg 25
Denver CO
USA 80225

ABOUT DATA -------- William Paulishak
WDC-A for Solar-Terrestrial Physics
c/o NOAA-EDS
Boulder CO
USA 80302

--- Magnetograph system may be replaced sometime in 1975-76 with a proton fluxgate system recording variations in D, H, Z, & F digitally on magnetic tape. In 1956, Fredericksburg replaced the Cheltenham Observatory which was located 75 km NE of the present site. Cheltenham coordinates N38.73 E283.16. Special purpose data usually available after 1 month. Regular data are photo copies of records, hourly values on mag tape and in tabular form, 2.5 minute digitized values for some intervals on mag tape.

ADDITIONAL COMMENTS ----- Special purpose data usually available after 3 months. Occasional All-sky Camera coverage at Fort Smith in Winter 1971-72 and Fall 1974.

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FORT YUKON

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ITEM: 177

DATE:10/06/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 66.56
STATION LONGITUDE ----------	E 214.78
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	03/1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Magnetometer, Schonstedt. Continuous recording at 4 inch/h of 3 components H, D, and Z.
RAW DATA ----------	Strip charts
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Archives Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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D01 Geomagnetic Standard a

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FREDERICKSBURG
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ITEM: 181
DATE:17/04/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 38.20
STATION LONGITUDE	E 282.63
ALTERNATE NAMES	
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ruska Rapid Run Magnetograph. Continuous recording, records changed daily. Ruska suspension variometers for H & D, modified La Cour for Z. Photo paper recording @ 4mm/minute on 30 cm X 50 cm record, separate record for each component. Absolutes taken weekly - semi-weekly for baseline control. Ruska housing modified for La Cour magnet.
RAW DATA	Photo paper records
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Photo copies, microfilm
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	John D. Wood USGS, Theoretical and Applied Geophysics Denver Federal Center, Bldg 25 Denver CO USA 80225
ADDRESS FOR INFORMATION ABOUT DATA	William Paulishak WDC-A for Solar-Terrestrial Physics c/o NOAA-EDS Boulder CO USA 80302
ADDITIONAL COMMENTS	Magnetograph system may be replaced sometime in 1975-76 by a proton-fluxgate system recording variations in D, H, Z & F digitally on magnetic tape. Special purpose data usually available after 1 month. Baseline determination is the only regular reduction on the Rapid Run data.

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ic Standard and Rapid Run Measurements (Cont.)

M: 181
E:17/04/75

Measurements

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DISCIPLINE ----------	D01 Geomag Standard and Rapid
STATION LATITUDE ----------	N 48.17
STATION LONGITUDE ----------	E 11.28
ALTERNATE NAMES ----------	
DATES OF OPERATION ---------	01/1841 to present Station moved Intermittent operation
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Schulze-Variometer (normal-run, sical photo-recording, one pape
RAW DATA ----------	Photorecorded gr
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Year-book listin monthly averages
DATA ROUTINELY PUBLISHED ----------	Veroffentlichung alischen Obs Fur Ludwig Maximilia Ergebnisse der E Erdmagnetischen bruck, Serie A,
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Geophysikalische Universitat Munc Ludwigshohe 8 Fuerstenfeldbr E Fed Rep Germany
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Station move since 1841 took place chen) to Maisach, and to Fuerstenf at Fuerstenfeldbruck uninterrupted Gaps in conservation of normal-run 1872-1882 and from 1914-1926.

ments (Cont.)

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ITEM: 182
DATE:11/07/75

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-- D01 Geomag Standard and Rapid Run Measurements
-- N 48.17
-- E 11.28
--
-- 01/1841 to present
Station moved
Intermittent operation
-- Regular
-- Schulze-Variometer (normal-run, 20 mm/h). Classical photo-recording, one paper per day.

---------- Photorecorded graphics
---------- Regular
ABLE AFTER ------ MONTHS
---------- Year-book listing of hourly values monthly averages, base-line values
---------- Veroffentlichungen des Geophysikalischen Obs Furstenfeldbruck der Ludwig Maximilians Univ Munchen. Ergebnisse der Beobachtungen am Erdmagnetischen Obs Furstenfeldbruck, Serie A, Nr...
---------- Yes

---------- Yes
OUT STATION ----- Geophysikalisches Obs Fuerstenfeldbruck
Universitat Munchen
Ludwigshohe 8
Fuerstenfeldbr Bavaria
Fed Rep Germany D 8080

OUT DATA -------- Same as above

Station move since 1841 took place from Munich (Munchen) to Maisach, and to Fuerstenfeldbruck, finally at Fuerstenfeldbruck uninterruptedly since 1938. Gaps in conservation of normal-run data were from 1872-1882 and from 1914-1926.

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D01 Geomagnetic Standard

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GENERAL BELGRANO
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ITEM: 911
DATE:02/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 77.97
STATION LONGITUDE ---------- E 321.20
ALTERNATE NAMES ---------- Belgrano
Gral Belgrano
DATES OF OPERATION ---------- 06/1972 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ La Cour magnetometer, Askania variometer
RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------- Dr. Horacio A. Cazeneuve
Instituto Antartico Argentino
Cerrito 1248
Buenos Aires
Argentina

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data available after 4 months.
Data are published by Instituto Antartico Argentino
as scientific contributions.

310

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GILLAM
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ITEM: 190
DATE:09/02/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 56.35
STATION LONGITUDE ---------- E 265.32
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 01/1972 to present
Intermittent operation
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- EDA Fluxgate magnetometer (variometer) with chart (YEW scratch type) recorder. The magnetic variations are recorded on a strip chart but no absolute measurements are made. The speed is 72mm/h

rd and Rapid Run Measurements (Cont.)

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GNANGARA
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ITEM: 202
DATE:21/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 31.78
STATION LONGITUDE	E 115.95
ALTERNATE NAMES	
DATES OF OPERATION	07/1957 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Eschenhagen Magnetograph, Three components H,D Continuous recording at 20 mm/h, weekly contro observations, chart speed 20 mm/h, H = 2.7 nT/ D = 1.07 min/mm, Z = 5.8 nT/mm.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Mean hourly values on magnetic tape and computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Geophysical Observatory Group Bureau of Mineral Resources P.O. Box 378 Canberra City Australia 2601
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Additional information about station: P. J. Gregs Observer-in-Charge, Mundaring Geophysical Obs, Mundaring, W.A., Australia 6073. Former locatio of station was Watheroo.

as scientific contributions.

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GILLAM
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ITEM: 190
DATE:09/02/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 56.35
STATION LONGITUDE ----------	E 265.32
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1972 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	EDA Fluxgate magnetometer (variometer) with chart (YEW scratch type) recorder. The magnetic variations are recorded on a strip chart but no absolute measurements are made. The speed is 72mm/h and the scale value is .76 nT/m when the microfilm is blown up 12 times.
RAW DATA ----------	35mm YEW scratch film
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	The records are checked and edited and microfilm copies made
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. J. K. Walker Earth Physics Branch, EMR 1 Observation Cresent Ottawa Ontario Canada KIA 043
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	The station is part of a meridian chain of stations which goes through Ft. Churchill.

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D01 Geomagnetic Standard

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GRAHAMSTOWN
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ITEM: 213
DATE:18/04/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 33.32
STATION LONGITUDE	E 26.50
ALTERNATE NAMES	
DATES OF OPERATION	10/1974 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Digital magnetometer, geomag variations, digital recording magnetometer (MOCSIR-type designed and constructed at Hermanus Magnetic Obs), elements D,H,Z,F recorded at 1 min intervals (D,H,Z by recording feedback current required to keep magnets accurately oriented, F from proton precession magnetometer).
RAW DATA	Digital magnetic tape
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables of hourly values, magnetic tape
DATA ROUTINELY PUBLISHED	MAGNETIC OBSERVATIONS AT GRAHAMSTOWN, annual publication distributed on exchange basis.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Kyoto, Hailsham, Charlottenlund
ADDRESS FOR INFORMATION ABOUT STATION	Magnetic Observatory (CSIR) P.O. Box 32 Hermanus Rep of So Africa 7200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data are availble usually after 3 months. Part of the South African network: Hermanus, Tsumeb, Hartebeesthoek, Grahamstown. Auxiliary equipment: PPM for F, QHM for H, Field declinometer for D.

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Standard and Rapid Run Measurements (Cont.)

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18/04/75

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DISCIPLINE ----------	D01 Geomag Standard and Rapid Run
STATION LATITUDE ----------	N 55.30
STATION LONGITUDE ----------	E 282.25
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1965 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	AMOS (Automatic Magnetic Observat continuous recording of earths ma (North), Y(East), Z(vertical), F(of field recorded once/min on dig tape with an analog output on str mm/h. Absolute observation of D(d I(inclination) and of total inter made once or twice a week.
RAW DATA ----------	Digital magnetic t
DATA REDUCTION PRACTICE ----------	Regular , Spec
REGULAR REDUCED DATA AVAILABLE AFTER ------	18 MONTHS
FORM OF REDUCED DATA ----------	Digital magnetic t microfilm
DATA ROUTINELY PUBLISHED ----------	Annual report
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Div. of Geomagneti Dept. of Energy, M 1 Observatory Cres Ottawa Ont Canada
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Standard run 3 component Ruska magne Portable fluxgate magnetometer for a observations, proton recession magne F observation; digital recording con 11/1972. Special purpose data usual after 2 months.

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ements (Cont.)

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ITEM: 217
DATE:02/06/75

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D01 Geomagnetic Standard a

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ITEM: 219
DATE:14/04/75

DISCIPLINE ----------	Dø1 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 13.59
STATION LONGITUDE ----------	E 144.87
ALTERNATE NAMES ----------	
DATES OF OPERATION ---------	07/1957 to present Station moved Intermittent operation
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Ruska Normal Magnetograph, continuous operations, records changed daily. Ruska suspension variometers for D, H, modified La Cour for Z. Photo paper recording on 19cmx53cm record at 20mm/h. Absolute observations for baseline control made weekly with QHMs, proton vector magnetometer and Ruska suspension magnetometer for D. Modified La Cour has a Ruska housing modified for La Cour magnet.
RAW DATA ----------	Photo paper records, mm scalings
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Photo paper, computer printout, mag tape, microfilm
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	John D. Wood USGS Theoretical & Applied Geophysics Denver Federal Center, Bldg. 25 Denver CO USA 80225
ADDRESS FOR INFORMATION ABOUT DATA --------	William Paulishak WDC-A for Solar-Terrestrial Physics NOAA-EDS Boulder CO USA 80302
ADDITIONAL COMMENTS -----	Absolute piers have not been moved. In 1968 the variations recording equipment was moved a short distance on the same site. The magnetograph may be replaced in the near future with a proton fluxgate system recording variations in D, H, Z and F. Special purpose data usually available after 1 month.

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netic Standard and Rapid Run Measurements (Cont.)

ITEM: 219
DATE:14/04/75 14d

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GUAM
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DISCIPLINE ----------	D01 Geomag Standard and Ra
STATION LATITUDE ----------	N 13.59
STATION LONGITUDE ----------	E 144.87
ALTERNATE NAMES ----------	
DATES OF OPERATION ---------	07/1957 to present Station moved
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Ruska Rapid Run Magnetogra ings, records changed dail variometers for D and H, m (Ruska housing modified fo Recording is at 4 mm/min w 30 cm x 50 cm for each com
RAW DATA ----------	Photo paper
DATA REDUCTION PRACTICE ----------	Regular ,
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 M
FORM OF REDUCED DATA ----------	Photo paper
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	John D. Woo USGS Theore Denver Fede Denver USA
ADDRESS FOR INFORMATION ABOUT DATA --------	William Pau WDC-A for S NOAA-EDS Boulder USA
ADDITIONAL COMMENTS -----	Variations recording equipmen distance on the same site in purpose data usually availabl

Run Measurements

ntinuous operations,
a suspension vario-
Cour for Z. Photo
record at 20mm/h.
seline control made
tor magnetometer and
r for D. Modified
modified for

ecords, mm scalings
Special
THS
computer printout,
rofilm

cal & Applied Geophysics
l Center, Bldg. 25
CO
80225

shak
ar-Terrestrial Physics

CO
80302

ved. In 1968 the
was moved a short
magnetograph may
with a proton
tions in D, H, Z
ually available

3

urements (Cont.)

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ITEM: 220
DATE:14/04/75

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------ D01 Geomag Standard and Rapid Run Measurements
------ N 13.59
------ E 144.87

------ 07/1957 to present
Station moved
------ Regular
----- Ruska Rapid Run Magnetograph, continuous recordings, records changed daily. Ruska suspension variometers for D and H, modified La Cour for Z. (Ruska housing modified for La Cour magnet). Recording is at 4 mm/min with photo paper record 30 cm x 50 cm for each component.

---------- Photo paper records
CE ---------- Regular , Special
AVAILABLE AFTER ------ 2 MONTHS
---------- Photo paper, microfilm copy
IED ----------
---------- Yes

UEST ----------

ON ABOUT STATION ----- John D. Wood
USGS Theoretical & Applied Geophysics
Denver Federal Center, Bldg. 25
Denver CO
USA 80302

ON ABOUT DATA -------- William Paulishak
WDC-A for Solar-Terrestrial Physics
NOAA-EDS
Boulder CO
USA 80302

---- Variations recording equipment moved a short distance on the same site in 1968. Special purpose data usually available after 1 month.

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313

D01 Geomagnetic Standard

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HALLEY BAY
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ITEM: 232
DATE:20/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 75.52
STATION LONGITUDE	E 333.22
ALTERNATE NAMES	
DATES OF OPERATION	05/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour Magnetometer, EDA Fluxgate magnetometer, continuous recording of 3 components of magnetic field, La Cour sensitivity about 8gamma/mm, chart speed 15 mm/h. E.D.A. Fluxgate recording H,D,Z, sensitivity about 30gamma/mm switching automatically to lower sensitivity in large storms, chart speed 20 mm/h (Note -- these are the instruments currently in use).
RAW DATA	Photographic paper (La Cour) strip chart (Fluxgate)
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Computer printout, magnetic tape, microfilm
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
	Denmark; Japan
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	W. M. Sievwright British Antarctic Survey Drummond Street Edinburgh Scotland EH8 9UA
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Regularly scheduled data normally available after 9-24 months, mean hourly values on computer printouts and magnetic tape, microfilm of original records, K-indices. Control by QHM, BMZ, fiber declinometer and PPM. Station on moving ice shelf rebuilt twice since 1956 with resiting of instruments within 2 miles of old location. Position not known to one hundredth of a degree. Occasional gaps in records from one or more instruments.

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c Standard and Rapid Run Measurements (Cont.)

: 232
:20/06/75

Measurements

magnetometer,
ts of magnetic
gamma/mm, chart
cording H,D,Z,
hing automati-
e storms, chart
he instruments

(La Cour)
te)

magnetic tape,

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EH8 9UA

ilable after
mputer
m of original
BMZ, fiber
ing ice shelf
g of instru-
Position not
Occasional
ruments.

****
HARTEBEESTHOEK
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DISCIPLINE ----------	D01 Geomag Standard and Rapid R
STATION LATITUDE ----------	S 25.88
STATION LONGITUDE ----------	E 27.71
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	12/1972 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Digital magnetometer (MOCSIR ty constructed at Hermanus Magneti Elements D,H,Z,F recorded at 1 (D,H,Z by recording feedback cu keep magnets accurately oriente precession magnetometer).
RAW DATA ----------	Digital magnetic
DATA REDUCTION PRACTICE ----------	Regular , Sp
REGULAR REDUCED DATA AVAILABLE AFTER ------	12 MONTHS
FORM OF REDUCED DATA ----------	Tables of hourly magnetic tape
DATA ROUTINELY PUBLISHED ----------	MAGNETIC OBS AT annual, distribu basis
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	Kyoto, Hailsham,
ADDRESS FOR INFORMATION ABOUT STATION -----	Magnetic Observa P.O. Box 32 Hermanus Rep of So Africa
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data usually avail 3 months. Part of organized South network of Hermanus, Tsumeb, Harte and Grahamstown. Auxiliary equip F, QHM for H, Field declinometer f

easurements (Cont.)

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ITEM: 238
DATE:18/04/75

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---------- D01 Geomag Standard and Rapid Run Measurements
---------- S 25.88
---------- E 27.71

--------- 12/1972 to present
--------- Regular
TION ----- Digital magnetometer (MOCSIR type designed and constructed at Hermanus Magnetic Observatory). Elements D,H,Z,F recorded at 1 min intervals (D,H,Z by recording feedback current required to keep magnets accurately oriented, F from proton precession magnetometer).
-------------------------- Digital magnetic tape
CTICE ------------------- Regular , Special
TA AVAILABLE AFTER ------ 12 MONTHS
TA ---------------------- Tables of hourly values, magnetic tape
LISHED ------------------ MAGNETIC OBS AT HARTEBEESTHOEK annual, distributed on exchange basis
------------------------ Yes
------------------------ Yes
------------------------ Yes
Kyoto, Hailsham, Charlottenlund
REQUEST -----------------
ATION ABOUT STATION ----- Magnetic Observatory
P.O. Box 32
Hermanus
Rep of So Africa 7200

ATION ABOUT DATA -------- Same as above
S ----- Special purpose data usually available after 3 months. Part of organized South African network of Hermanus, Tsumeb, Hartebeesthoek, and Grahamstown. Auxiliary equipment - PPM for F, QHM for H, Field declinometer for D.

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314

D01 Geomagnetic Standard a

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HARTLAND
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ITEM: 239
DATE:29/04/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 50.99
STATION LONGITUDE	E 355.52
ALTERNATE NAMES	
DATES OF OPERATION	01/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour magnetometer and Rubidium magnetometer, Suspended or balanced magnets, D,H,Z continuous recording, 15 mm/h, plus 3 Rubidium sensors, backing off coils, D, H, Z, 2 samples/min onto magnetic tape.
RAW DATA	Photo paper, digital magnetic tape, microfilm
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, magnetic tape
DATA ROUTINELY PUBLISHED	Geomagnetic Bulletin, typical annual volume
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
	Copenhagen; Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Director Institute of Geological Sciences Herstmonceux Castle Hailsham Sussex UK BN27 1RP
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Formerly at Abinger 1925-1957 N51.18 E359.61, Formerly at Greenwich 1841-1925 N51.48 E0.00.

314 2

tic Standard and Rapid Run Measurements (Cont.)

TEM: 239
ATE:29/04/76

un Measurements

um magnetometer,
D,H,Z continuous
dium sensors,
amples/min onto

ital magnetic

tape
etin, typical

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logical Sciences
tle
Sussex
BN27 1RP

18 E359.61,
1.48 E0.00.

****
HERMANUS
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DISCIPLINE ----------	D01 Geomag Standard and Rapid
STATION LATITUDE ----------	S 34.42
STATION LONGITUDE ----------	E 19.22
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1974 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Digital magnetometer, geomagne digital recording magnetometer designed and constructed at He Observatory. Elements D,H,Z,F minute intervals (D,H,Z by rec currents required to keep magn oriented, F from proton magnet
RAW DATA ----------	Digital magneti
DATA REDUCTION PRACTICE ----------	Regular , S
REGULAR REDUCED DATA AVAILABLE AFTER ------	12 MONTH
FORM OF REDUCED DATA ----------	Tables of hourl magnetic tape
DATA ROUTINELY PUBLISHED ----------	MAGNETIC OBSERV tabulated hourl buted on exchan
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
	Kyoto, Hailsham
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Magnetic Observ
	P.O. Box 32
	Hermanus
	Rep of So Afric
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	The Magnetic Observatory was move S33.95 E18.47 to Hermanus on 1/1/ missioning digital magnetometer, ments used were a La Cour magneto 8/1932-12/1940) and an Askania ma 1/1941-12/1973). Part of organize Tsumeb/Hartebeesthoek/Grahamstown equipment - Cesium magnetometer f Smith magnetometer for H, Askania meter for D. Special purpose dat

isurements (Cont.)

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ITEM: 248
DATE:18/04/75

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--------- D01 Geomag Standard and Rapid Run Measurements
--------- S 34.42
--------- E 19.22

--------- 01/1974 to present
--------- Regular
TION ----- Digital magnetometer, geomagnetic variations, digital recording magnetometer (MOCSIR-type) designed and constructed at Hermanus Magnetic Observatory. Elements D,H,Z,F recorded at 1 minute intervals (D,H,Z by recording feedback currents required to keep magnets accurately oriented, F from proton magnetometer).
---------- Digital magnetic tape
CTICE ---------- Regular , Special
TA AVAILABLE AFTER ------ 12 MONTHS
TA ---------- Tables of hourly values, magnetic tape
LISHED ---------- MAGNETIC OBSERVATIONS AT HERMANUS tabulated hourly values, distributed on exchange basis
---------- Yes
---------- Yes
---------- Yes
Kyoto, Hailsham, Charlottenlund

REQUEST ----------
ATION ABOUT STATION ----- Magnetic Observatory (CSIR)
P.O. Box 32
Hermanus
Rep of So Africa 7200

ATION ABOUT DATA -------- Same as above
S ----- The Magnetic Observatory was moved from Cape Town S33.95 E18.47 to Hermanus on 1/1/1941. Prior to commissioning digital magnetometer, recording instruments used were a La Cour magnetometer (Cape Town 8/1932-12/1940) and an Askania magnetometer(Hermanus 1/1941-12/1973). Part of organized network Hermanus/Tsumeb/Hartebeesthoek/Grahamstown. Auxiliary equipment - Cesium magnetometer for F, Schuster-Smith magnetometer for H, Askania standard magnetometer for D. Special purpose data after 3 months.

1 315

D01 Geomagnetic Standard

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HERMANUS
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ITEM: 249
DATE:18/04/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 34.42
STATION LONGITUDE	E 19.22
ALTERNATE NAMES	
DATES OF OPERATION	01/1941 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Askania magnetometer, continuous photographic recording, 20 mm/h, with full baseline control. Scale values: H, 2.3 nT/mm; Z, 4.6 nT/mm; D, 0.55 nT/mm. From 1/1974 hourly values are obtained directly from digital magnetometer installed in 1973. Proton precession and Cesium magnetometers for F, Schuster-Smith magnetometer for H, Askania standard magnetometer for D.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables (magnetic activity, SSCs, etc.) monthly, magnetic tape
DATA ROUTINELY PUBLISHED	MAGNETIC BULLETIN (monthly), MAGNETIC OBSERVATIONS AT HERMANUS (annual)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Kyoto, Hailsham, Charlottenlund
ADDRESS FOR INFORMATION ABOUT STATION	Magnetic Observatory (CSIR) P.O. Box 32 Hermanus Rep of So Africa 7200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data available include tables of magnetic activity, SSCs, etc. on a monthly basis, and tables and magnetic tape of hourly values 1/1941-12/1973 on a yearly basis. Monthly data in MAGNETIC BULLETIN, hourly values in MAGNETIC OBSERVATIONS AT HERMANUS. The Magnetic Observatory moved from Cape Town (S33.95 E18.47) to Hermanus on 1/1/41. Period of operation of Cape Town 8/1932-12/1940, recording instruments La Cour normal run and rapid run magnetographs.

2

tic Standard and Rapid Run Measurements (Cont.)

EM: 249
TE:18/04/75

n Measurements

s photographic
aseline control.
4.6 nT/mm;
rly values are ob-
gnetometer in-
sion and Cesium
mith magnetometer
meter for D.
er

activity, SSCs,
magnetic tape
N (monthly), MAG-
NS AT HERMANUS

Charlottenlund

tory (CSIR)

7200

agnetic activity,
tables and magne-
2/1973 on a yearly
ULLETIN, hourly
HERMANUS. The
pe Town (S33.95
riod of operation
ding instruments
agnetographs.

****
HONG KONG
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DISCIPLINE ----------	D01 Geomag Standard and Rapid
STATION LATITUDE ----------	N 22.36
STATION LONGITUDE ----------	E 114.22
ALTERNATE NAMES ----------	Physics Dept, Hong Kong Univ. Royal Obs, Hong Kong
DATES OF OPERATION ---------	1884 to present Station moved Intermittent operation
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	La Cour variometers, BMZ,QHM, continuous magnetograms of H, urements fortnightly, typical arrangement, chart speed 1.5
RAW DATA ----------	Photographic p
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	12 MONT
FORM OF REDUCED DATA ----------	Yearly bulleti
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	G. O. Walker Physics Depart Hong Kong Univ Hong Kong
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	1884-1920 Site A Royal Observat site B Royal Observatory. Both 1928-12/1941 Au Tau(New Territo 1971 to present at Tates Cairn (

leasurements (Cont.)

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ITEM: 267
DATE:20/06/75

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----------	D01 Geomag Standard and Rapid Run Measurements
E ----------	N 22.36
DE ----------	E 114.22
----------	Physics Dept, Hong Kong Univ. Royal Obs, Hong Kong
ION ---------	1884 to present Station moved Intermittent operation
ULE ---------	Regular
RIPTION -----	La Cour variometers, BMZ,QHM, Proton Magnetometer continuous magnetograms of H,D,Z, absolute measurements fortnightly, typical La Cour variometer, arrangement, chart speed 1.5 cm/h.
----------	*Photographic paper*
PRACTICE ----------	Regular
DATA AVAILABLE AFTER ------	12 MONTHS
DATA ----------	Yearly bulletin, microfilm
PUBLISHED ----------	
C-A ----------	Yes
C-B ----------	
C-C ----------	
ON REQUEST ----------	Yes
ORMATION ABOUT STATION -----	G. O. Walker Physics Department Hong Kong University Hong Kong
ORMATION ABOUT DATA --------	Same as above

ENTS ----- 1884-1920 Site A Royal Observatory, 1921-1927 site B Royal Observatory. Both at N22.31 E114.15. 1928-12/1941 Au Tau(New Territories) N22.45 E114.05. 1971 to present at Tates Cairn Observatory.

1 316

D01 Geomagnetic Standard a

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HONOLULU
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ITEM: 270
DATE:18/02/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 21.32
STATION LONGITUDE ----------	E 201.99
ALTERNATE NAMES ----------	
DATES OF OPERATION ---------	01/1902 to present Station moved
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Proton Vector Magnetometer, Ruska Magnetometer, Ruska Variometers-Ruska magnetometer used for absolute control: absolute observations made at least once a week. Magnetic variations are recorded by Ruska Variometers whose output is photographic paper.
RAW DATA ----------	Photographic paper
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables, photographic paper
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Honolulu Observatory NOAA/NWS 91-270 Ft. Weaver Road Ewa Beach HI USA 96706
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	From 1947 to 1960 the Observatory was located 10 km West of the present site. Prior to 1947 the Observatory was located approximately midway between the last two sites. Data available as tables of mean hourly scalings, photographic paper, K figures, baseline results, rapid variations and pulsations.

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HURBANOVO
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ITEM: 807
DATE:00/00/75

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netic Standard and Rapid Run Measurements (Cont.)

ITEM: 270
DATE:18/02/75

Run Measurements

Ruska Magnetometer,
cometer used for ab-
rvations made at
variations are re-
hose output is

aper

HS
raphic paper
CAL DATA (NOAA)

vatory

ver Road
HI
96706

y was located 10 km
to 1947 the Obser-
midway between
le as tables of mean
per, K figures,
ns and pulsations.

****
HYDERABAD
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DISCIPLINE ----------	D01 Geomag Standard and Rap
STATION LATITUDE ----------	N 17.42
STATION LONGITUDE ----------	E 78.55
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	12/1964 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour Variometers, D,H,Z, along with baseline whose v separately. All 3 elements photographic paper with cha
RAW DATA ----------	Photographic
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	12 MO
FORM OF REDUCED DATA ----------	Tables, comp
DATA ROUTINELY PUBLISHED ----------	INDIAN MAGNE OBSERVATORIE
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Hari Nar National Geo Uppal Road Hyderabad India
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as abov
ADDITIONAL COMMENTS -----	The Observatory is at an inlan outside the influence of the e and Deccan trap induced curren minations for the variation re observations with QHM and BMZ.

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surements (Cont.)

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ITEM: 274
DATE:02/06/75

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-------- D01 Geomag Standard and Rapid Run Measurements
-------- N 17.42
-------- E 78.55

-------- 12/1964 to present
-------- Regular
ON ----- La Cour Variometers, D,H,Z, continuously recorded along with baseline whose values are determined separately. All 3 elements recorded on the same photographic paper with chart speed 15 mm/h.
---------- Photographic paper, microfilm
ICE ---------- Regular
AVAILABLE AFTER ------ 12 MONTHS
---------- Tables, computer printouts
SHED ---------- INDIAN MAGNETIC DATA, annual, OBSERVATORIES DATA VOLUME
---------- Yes

QUEST ---------- Yes
ION ABOUT STATION ----- Dr. Hari Narain, Director
National Geophysical Research Institute
Uppal Road
Hyderabad Andhra Pradesh
India 500 007

ION ABOUT DATA -------- Same as above
----- The Observatory is at an inland location just outside the influence of the equatorial electrojet and Deccan trap induced currents. Baseline determinations for the variation records are done by observations with QHM and BMZ.

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ITEM: 279
DATE:05/06/75

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hourly scalings, photographic paper, K figures,
baseline results, rapid variations and pulsations.

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HURBANOVO
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ITEM: 807
DATE:00/00/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 47.87
STATION LONGITUDE ----------	E 18.18
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1890 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Magnetic Field Measurements
RAW DATA ----------	Photorecorded graphics, digital magnetic tape
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Photorecorded graphics
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. Stephen Pinter Geophysical Inst, Slovak Acad of Scien Geomagnetic Observatory Hurbanovo Czechoslovakia 94701
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS -----	

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ADDITIONAL COMMENTS ----- [illegible] outside the influence of the equatorial electrojet and Deccan trap induced currents. Baseline determinations for the variation records are done by observations with QHM and BMZ.

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INUVIK

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ITEM: 279
DATE·05/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 68.25
STATION LONGITUDE ---------- E 226.70
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1971 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- EDA Fluxgate Magnetometer, continuous recording on tape
RAW DATA ---------- 1/2 inch digital tape
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Instrument owned and operated by University of Alberta, Edmonton, Alberta, Canada. Our tapes are copies of their archive records. Part of Univ. of Alaska N-S meridian chain through Fairbanks.

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D01 Geomagnetic Standard an

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IRKUTSK
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ITEM: 865
DATE:00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 52.17
STATION LONGITUDE	E 104.45
ALTERNATE NAMES	Patrony
DATES OF OPERATION	07/1887 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard and scalar field magnetometers
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	16 mm microfilm of graphics
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. V. M. Mishin SibIZMIR P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

d and Rapid Run Measurements (Cont.)

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JAIPUR
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ITEM: 285
DATE:02/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE ---------- N 26.92
STATION LONGITUDE ---------- E 75.79
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1975 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- IZMIRAN (Bobrov) Quartz Variometers for D,H,Z
Variations of the 3 geomagnetic elements D,H,
are continuously recorded along with baseline
whose values are determined separately. All
elements are recorded on a single photographi
paper at a chart speed of 20 mm/h.
RAW DATA ---------- Photographic paper, microfilm
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Tables, computer printout
DATA ROUTINELY PUBLISHED ---------- INDIAN MAGNETIC DATA, annual
Indian Inst Geomagnetism, Bomb
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. B. N. Bhargava, Director
Indian Institute of Geomagneti
Dr. Nanabhai Moos Marg
Colaba, Bombay Maharashtra
India 400 005

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Observatory started as part of Indian participa-
tion in Geomagnetic Meridian Project (GMP),
expected to continue for duration of IMS. Basel
determinations for H and Z are done by daily obs
vations of absolute H,Z with QHM and BMZ respect
ively and for D by observations of absolute D wi
QHM once a week, on Wednesday at about local noo
Observed absolute values periodically standard-
ized by intercomparison with those observed at A
bag using a set of QHM, BMZ as touring standards

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318

D01 Geomagnetic Standard a

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KAKIOKA
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ITEM: 291
DATE:23/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 36.23
STATION LONGITUDE	E 140.21
ALTERNATE NAMES	
DATES OF OPERATION	01/1913 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	KASMMER Standard Magnetometer, KM(H,D) and KZ(Z) Variometers--KASMMER (Kakioka automatic standard magnetometer) Proton magnetometer, DI-72 magnetometer theodolite, and 4 optical-pumping magnetometers (F,H,D,Z continuous), data acquisition and storage by computer: Variometers are suspended bar-magnet type, continuous observations, 2.5 gamma/mm, 20 mm/h.
RAW DATA	Photographic paper, strip chart, tables, computer printouts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, magnetic tape, microfilm computer printouts
DATA ROUTINELY PUBLISHED	Report of the Kakioka Magnetic Obs (annual), Report of the Geomagnetic and Geoelectric Observations (rapid variations)(annual)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Kyoto, Japan
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	K. Yanagihara, Director Kakioka Magnetic Observatory Kakioka 595 Yasato-machi Ibaraki-ken Japan 315-01
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Auxiliary equipment: MOP Vector Proton Magnetometer. Special purpose data available after 1 month.

d and Rapid Run Measurements (Cont.)

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KANDILLI
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ITEM: 294
DATE:23/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 41.06
STATION LONGITUDE	E 29.06
ALTERNATE NAMES	Istanbul
DATES OF OPERATION	01/1947 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Askania Magnetometer, geomagnetic Variations
RAW DATA	Photographic paper, computer printouts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	4 MONTHS
FORM OF REDUCED DATA	Tables, microfilm, computer printouts
DATA ROUTINELY PUBLISHED	GEOMAGNETIC RESULTS, Kandilli Ob
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Istanbul - Kandilli Observatory Magnetic Service Cengelkoy Istanbul Turkey
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 1 month.

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KANOYA
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ITEM: 295
DATE:23/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 31.42
STATION LONGITUDE	E 130.88
ALTERNATE NAMES	
DATES OF OPERATION	01/1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Proton magnetometer, MO-I magnetometer theodoli KM(H,D) and KZ(Z) variometers suspended bar-magnet type, continuous observations, 2.5 gamma/mm, 20 mm/h.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS

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KANOYA

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ITEM: 295

DATE:23/06/75

18

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements

STATION LATITUDE ---------- N 31.42

STATION LONGITUDE ---------- E 130.88

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 01/1958 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- Proton magnetometer, MO-I magnetometer theodolite KM(H,D) and KZ(Z) variometers suspended bar-magnet type, continuous observations, 2.5 gamma/mm, 20 mm/h.

RAW DATA ---------- Photographic paper

DATA REDUCTION PRACTICE ---------- Regular

REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS

FORM OF REDUCED DATA ---------- Tables, magnetic tape, microfilm computer printouts

DATA ROUTINELY PUBLISHED ---------- Report of the Kakioka Magnetic Observatory, annual report

DATA SENT TO WDC-A ---------- Yes

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ---------- Yes

Kyoto, Japan

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- K. Yanagihara, Director
Kakioka Magnetic Observatory
Kakioka 595
Yasato-machi Ibaraki-ken
Japan 315-01

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS ----- Auxiliary equipment: GSI-I magnetometer theodolite, Fluxgate magnetometer.

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D01 Geomagnetic Standard

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KARAGANDA
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ITEM: 836
DATE:00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 49.81
STATION LONGITUDE	E 73.08
ALTERNATE NAMES	
DATES OF OPERATION	01/1966 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard Magnetometer
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Photographic prints, black/white
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	M. P. Rudina Ionospheric Section, Acad Sci of Kaz 68 Kamenskoe Plato Alma-Ata USSR
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

319

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KARAVIA
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ITEM: 163
DATE:12/05/75

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etic Standard and Rapid Run Measurements (Cont.)

ITEM: 836
DATE:00/00/75 19a

Run Measurements

HS
rints, black/white

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KEM
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DISCIPLINE	D01 Geomag Standard and Rapi
STATION LATITUDE	N 65.00
STATION LONGITUDE	E 34.40
ALTERNATE NAMES	
DATES OF OPERATION	01/1973 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard Magnetometer
RAW DATA	Photorecorded
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MON
FORM OF REDUCED DATA	Microfilm, ta
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Michail I Dept of Terre Leningrad Sta Leningrad USSR
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

ITEM: 163
DATE:12/05/75 19

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KIEV
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rements (Cont.)

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ITEM: 785
DATE:00/00/75 19c

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----- D01 Geomag Standard and Rapid Run Measurements
----- N 65.00
----- E 34.40

----- 01/1973 to present
----- Regular
----- Standard Magnetometer
---------- Photorecorded graphics

ILABLE AFTER -------- MONTHS
---------- Microfilm, tabular matter

T ----------
ABOUT STATION ------ Dr. Michail I. Pudovkin
Dept of Terrestrial Physics, Phys Inst
Leningrad State University
Leningrad
USSR 199 164

ABOUT DATA --------- Same as above
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ITEM: 849
DATE:00/00/75 19d

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--- D01 Geomag Standard and Rapid Run Measurements

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KARAVIA
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ITEM: 163
DATE:12/05/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 11.65
STATION LONGITUDE ---------- E 27.47
ALTERNATE NAMES ---------- Lubumbashi
Elizabethville
DATES OF OPERATION ---------- 1956 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ----- La Cour magnetometer, Standard measurements, 3x3 BMZ - 3x2 QHM/week. H (CIW), and I (ASKANIA) are out of use. D (QHM); chart speed 15mm/h.

RAW DATA ---------- Photographic papers, tables
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Tables, films (on request)
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Geophysical Observatory Karavia
Service Meteo Du Zaire
Binza
Kinshasa
Zaire

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Operation intermittent 10/1962 to 08/1965. Special purpose data available after 12 months.

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ADDITIONAL COMMENTS -----

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KIEV
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ITEM: 849
DATE: 00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 50.72
STATION LONGITUDE ---------- E 30.30
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1958 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Magnetic station, +2000 to -2000 gamma
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. A. K. Yukhimuk
Inst of Geophysics, Ukranian Acad of
32, Polladin Avenue
Kiev
USSR 68

ADDRESS FOR INFORMATION ABOUT DATA ---------
ADDITIONAL COMMENTS ------ Telephone 44-23-13

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320

D01 Geomagnetic Standard a

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KIRUNA
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ITEM: 315
DATE:18/02/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 67.83
STATION LONGITUDE	E 20.42
ALTERNATE NAMES	
DATES OF OPERATION	04/1950 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour and Fluxgate Magnetometers
RAW DATA	Photographic paper, magnetic tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, tape of 1 min values
DATA ROUTINELY PUBLISHED	KIRUNA GEOPHYSICAL DATA
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Copenhagen
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Library Kiruna Geophysical Institute Kiruna Sweden S-981 01
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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KODAIKANAL
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ITEM: 323
DATE:02/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements

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rd and Rapid Run Measurements (Cont.)

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ITEM: 991
DATE:15/05/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE ----------	N 32.40
STATION LONGITUDE ----------	E 243.50
ALTERNATE NAMES ----------	OL C, 12 Weather Squadron Navy Electronic Lab Cen (NELC)
DATES OF OPERATION ----------	10/1970 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Triaxial and Rubidium Magnetometer
RAW DATA ----------	Logs, chart rolls
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Logs, chart rolls
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	OL C, 12th Weather Squadron Route 1, Box 591 Campo CA USA 92006
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data are regularly sent to NELC, San Diego.

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L AQUILA
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ITEM: 332
DATE:30/01/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE ----------	N 42.38

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KODAIKANAL
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ITEM: 323
DATE: 02/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 10.23
STATION LONGITUDE ---------- E 76.95
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1949 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- A set of D,H,Z La Cour variometers; variations of D,H,Z continuously recorded, along with baselines whose values are determined separately. All 3 elements are recorded on a single photographic paper at a chart speed of 15 mm/h.

RAW DATA ---------- Photographic paper, microfilm
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Monthly tables on computer printout
DATA ROUTINELY PUBLISHED ---------- INDIAN MAGNETIC DATA (annual) with mean hourly values of D, H, Z and magnetic storm statistics
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. M. K. Bappu, Director
Indian Institute of Astrophysics
Kodaikanal Tamil Nadu
India 624 103

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- INDIAN MAGNETIC DATA is published annually by the Director, Indian Institute of Geomagnetism, Colaba, Bombay 400 005, India. A magnetic observatory was operated by the Survey of India from early 1906 to about 1923 when it was closed down. Baseline determinations are made by observations with QHM and BMZ. The observed absolute values are periodically standardized by intercomparison with those at Alibag, using a set of QHM and BMZ as touring standards.

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L AQUILA

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ITEM: 332
DATE: 30/01/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 42.38
STATION LONGITUDE ---------- E 13.31
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 05/1958 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Standard Magnetometer
RAW DATA ---------- Photographs
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Microfilm
DATA ROUTINELY PUBLISHED ---------- Yearbooks--hourly values for H, D, Z, daily, monthly, annual mean values. K indices monthly bulletin.
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Franco Molina
Istituto Nazionale di Geofisica
Via Ruggero Bonghi 11/B
Roma
Italy 00184

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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D01 Geomagnetic Standard

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ITEM: 753
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 35.00
STATION LONGITUDE ---------- E 302.32
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Normal speed (15 mm/h) standard magnetographs
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER -------- MONTHS
FORM OF REDUCED DATA ---------- Microfilm
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Otto Schneider
Observatorio Astronomico
Paseo del Bosque
La Plata
Argentina

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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LEIRVOGUR
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ITEM: 341
DATE:21/02/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 64.18

d and Rapid Run Measurements (Cont.)

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LEIRVOGUR
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ITEM: 342
DATE:21/02/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 64.18
STATION LONGITUDE	E 338.30
ALTERNATE NAMES	Reykjavik
DATES OF OPERATION	01/1966 to present Intermittent
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Sigurgeirsson continuous proton magnetometer, continuous recording of the total magnetic field strength and recording of hourly averages. Instrument produces an uninterrupted record of the total field. Recording speed generally maintained at 15 mm/h with scale values of about 20 g/mm and 7 g/mm. Recordings made on punched paper tape are used to evaluate hourly averages of the total force.
RAW DATA	Chart recordings, punched cards
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables, punched cards
DATA ROUTINELY PUBLISHED	LEIRVOGUR MAGNETIC RESULTS, published annually.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Charlottenlund; Denmark
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Th. Saemundsson Raunvisindastofnun Haskolans Dunhaga 3 Reykjavik Iceland
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Up to 1971, there were fairly frequent gaps in operation, but these were generally of short duration. A conventional proton magnetometer recording once every 10 min was used to fill the gaps as far as hourly averages were concerned. Preliminary data are available after 1 month.

321

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LEIRVOGUR

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ITEM: 341
DATE: 21/02/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 64.18
STATION LONGITUDE	E 338.30
ALTERNATE NAMES	Reykjavik
DATES OF OPERATION	08/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour magnetometers, magnetic field recordings of the vertical component, horizontal component and declination. Normal-run records, recording speed 15 mm/h. Scale value approximately 15 g/mm for H and Z and 2.3 g/mm for D. Quick-run records - Recording speed 180 mm/h. Scale value approximately 7 g/mm for H, 6 g/mm for Z and 1.4 g/mm for D.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables, punched cards
DATA ROUTINELY PUBLISHED	LEIRVOGUR MAGNETIC RESULTS, published yearly.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Charlottenlund, Denmark
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Th. Saemundsson Raunvisindastofnun Haskolans Dunhaga 3 Reykjavik Iceland
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Preliminary data are available after 1 month.

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D01 Geomagnetic Standard

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LENINGRAD
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ITEM: 857
DATE: 00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 59.56
STATION LONGITUDE	E 30.16
ALTERNATE NAMES	
DATES OF OPERATION	01/1869 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard and rapid run magnetometers
RAW DATA	Photorecorded graphics
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	35 mm microfilm of graphics
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. N. Zaitsev IZMIRAN P/O Akademgorodok Moscow USSR
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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LERWICK
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ITEM: 343
DATE: 29/04/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 60.13
STATION LONGITUDE	E 358.82
ALTERNATE NAMES	
DATES OF OPERATION	1923 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour magnetometer, normal run magnetograph D, H, Z, continuous, 15 mm/h
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, magnetic tape
DATA ROUTINELY PUBLISHED	GEOMAGNETIC BULLETIN, annual
DATA SENT TO WDC-A	Yes

rd and Rapid Run Measurements (Cont.)

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LOGRONO
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ITEM: 352
DATE:06/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 42.45
STATION LONGITUDE ---------- E 357.50
ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 01/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- La Cour Magnetometer, Absolute magnetometers--
H,Z Variographs, QHM, BMZ, Declinometer. D,H,
Variograph speed 15 mm/h, absolute measurement
weekly

RAW DATA ---------- Film, photographic paper, table
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, microfilm
DATA ROUTINELY PUBLISHED ---------- ANUARIOS DEL SERVICIO DE GEOMAG
TISMO Y AERONOMIA

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Charlottenlund

DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- L. De Miguel
Instituto Geografico y Catastra
Gral Ibanez de Ibero, 3
Madrid 3
Spain

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- The publication of Instituto Geografico y Catastr
is available on exchange. It contains tables of
hourly and mean values, K indices, magnetic pheno
ena.

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LORING AFB
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ITEM: 358
DATE:14/01/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 46.95
STATION LONGITUDE ---------- E 292.12

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

322

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LERWICK
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ITEM: 343
DATE:29/04/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 60.13
STATION LONGITUDE ---------- E 358.82
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 1923 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- La Cour magnetometer, normal run magnetograph D, H, Z, continuous, 15 mm/h
RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, magnetic tape
DATA ROUTINELY PUBLISHED ---------- GEOMAGNETIC BULLETIN, annual
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Copenhagen; Tokyo
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Director
Institute of Geological Sciences
Herstmonceux Castle
Hailsham Sussex
United Kingdom BN27 1RP

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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Madrid 3
Spain

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- The publication of Instituto Geografico y Catastral is available on exchange. It contains tables of hourly and mean values, K indices, magnetic phenomena.

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LORING AFB
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ITEM: 358
DATE:14/01/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 46.95
STATION LONGITUDE ---------- E 292.12
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 11/1966 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION -----
Magnetic Field Measurements
RAW DATA ---------- Photorecorded graphics
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Col Dale J. Flinders
Hq AWS/DN
Headquarters Air Weather Service
Stott AFB IL
USA 62225

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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D01 Geomagnetic Standard

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LUCKY LAKE
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ITEM: 363
DATE:16/07/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 51.15
STATION LONGITUDE ---------- E 252.74
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1969 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Fluxgate Magnetometer - Serson-type IGY fluxgate magnetometer modified for greatly increased stability. Continuous observation on strip chart; digital recording available when requested.
RAW DATA ---------- Strip chart, digital 7-track tape (if requested prior to recording)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. K. V. Paulson
Inst of Space and Atmospheric Studies
University of Saskatchewan
Saskatoon Saskatchewan
Canada S7N QWO

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Operation in conjunction with three-component induction coil Magnetometer and earth current system (two components).

nd Rapid Run Measurements (Cont.)

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LUNPING
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ITEM: 366
DATE: 17/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 25.00
STATION LONGITUDE	E 121.17
ALTERNATE NAMES	
DATES OF OPERATION	07/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ruska normal magnetograph, Geometrics G 805, G. S. I. precise magnetometer, normal recording. Normal magnetograph with recording speed of 20 mm/h. The absolute observation is made twice a week.
RAW DATA	Photographic paper of magnetograms
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	Report of Lunping Observatory, Sunspots, published by Telecommunication Laboratories, M.O.C., Rep. of China
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Freiburg, Zurich
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Yinn-Nien Huang, Chief, Planning and Telecommunication Laboratories, M.O.C P.O. Box 71 Chung-Li Taiwan Republic of China 320
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose observations are usually available after 1 month.

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LVOV
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ITEM: 830
DATE: 00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 49.90
STATION LONGITUDE	E 23.75
ALTERNATE NAMES	
DATES OF OPERATION	07/1929 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard and rapid run magnetometer
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose observations are usually available after 1 month.

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LVOV
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ITEM: 830
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 49.90
STATION LONGITUDE ---------- E 23.75
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1929 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Standard and rapid run magnetometer
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. A. P. Bondarenko
Mathematical Physics, Inst for Math
Ukranian SSR Academy of Sciences
Lvov Jaroslavenco 27
USSR 29001

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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D01 Geomagnetic Standard

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LYCKSELE
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ITEM: 370
DATE:18/02/76

DISCIPLINE ----------	DØ1 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 64.62
STATION LONGITUDE ----------	E 18.67
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	Ø1/1970 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour and standard magnetometers
RAW DATA ----------	Photographic paper, strip charts
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	Q-indices are included in the LYCKSELE IONOSPHERIC DATA publications.
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Ove Klang Ionospheric Observatory Box 100 LYCKSELE Sweden S-921 00
ADDRESS FOR INFORMATION ABOUT DATA --------	Library Kiruna Geophysical Institute Kiruna Sweden S-981 01

ADDITIONAL COMMENTS -----

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MACQUARIE ISLAND
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ITEM: 376
DATE:21/06/75

rd and Rapid Run Measurements (Cont.)

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MACQUARIE ISLAND
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ITEM: 378
DATE:06/21/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	S 54.50
STATION LONGITUDE ----------	E 158.95
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1963 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour Rapid Run Magnetograph, three componen H, D, Z. Continuous recording, monthly scale value observations.
RAW DATA ----------	Photographic paper
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Geophysical Observatory Group Bureau of Mineral Resources P.O. Box 378 Canberra City Australia 2601
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS -----	

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MAGADAN
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ITEM: 868
DATE:00/00/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 60.00
STATION LONGITUDE ----------	E 151.00
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	11/1966 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Standard and scalar field magnetometers

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MACQUARIE ISLAND
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ITEM: 376
DATE: 21/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 54.50
STATION LONGITUDE ---------- E 158.95
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1952 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- La Cour Magnetograph normal run, 3 components H, D, Z, continuous recording 20 mm/h, twice weekly control observations.

RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------- 15 MONTHS
FORM OF REDUCED DATA ---------- Mean hourly values on magnetic tape, computer printouts

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Geophysical Observatory Group
Bureau of Mineral Resources
P.O. Box 378
Canberra City
Australia 2601

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS -----

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MAGADAN

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ITEM: 868

DATE:00/00/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 60.00
STATION LONGITUDE ----------	E 151.00
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	11/1966 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Standard and scalar field magnetometers
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	16 mm microfilm of graphics
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. V. M. Mishin SibIZMIR P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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D01 Geomagnetic Standard a

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MANILA
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ITEM: 390
DATE:03/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 14.64
STATION LONGITUDE	E 121.08
ALTERNATE NAMES	
DATES OF OPERATION	04/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Heliflux station magnetometer, model HSM-1. 24 hour run, 1.5 inch/h, routine observations.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1/30 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	The Director Manila Observatory P.O. Box 1231 Manila Philippines D 404
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Since 10/1973 an attachment was made to record micropulsations. Chart travel is 35 inch/h.

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c Standard and Rapid Run Measurements (Cont.)

l: 390
:03/06/75

Measurements

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inch/h.

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DISCIPLINE ----------	D01 Geomag Standard and Rapid Ru
STATION LATITUDE ----------	N 36.47
STATION LONGITUDE ----------	E 353.80
ALTERNATE NAMES ----------	San Fernando
DATES OF OPERATION ----------	1880 to present
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION -----	La Cour Magnetometer, together w continuously recording Proton ma Z,D,F variographs, controlling b with absolute. La Cour magnetom ing scale values: H 4.4gamma/mm, Z 6gamma/mm. Speed 15mm/h, conti The proton magnetometer records with speed 6 mm/h (variable). S 1.5gamma/mm, continuous recordin surements are made regularly, at week.
RAW DATA ----------	Film, photographi Strip charts (Pro
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables with mean ues for D,H,Z,F,
DATA ROUTINELY PUBLISHED ----------	The results of Ge are published yea LAS OBSERVACIA, N SEISMICAS Y MAGNE able on scientifi basis or at a pri
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Charlottenlund, D
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	The Director Instituto y Obser San Fernando Ca Spain
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Until 1967 the Observatory recorded from 1967: H,D,Z; from 1975: H,D,Z, Auxiliary equipment: absolute measu ton Magnetometer and coil system. type KEW. Besides, the Observatory cal pumping magnetometer (Cesium an sensor), with coil system, availabl occasionally F and H or Z with high (0.1gamma/mm).

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nts (Cont.)

ITEM: 532
DATE:10/06/75

D01 Geomag Standard and Rapid Run Measurements
N 36.47
E 353.80
San Fernando
1880 to present

La Cour Magnetometer, together with a total field continuously recording Proton magnetometer. H, Z,D,F variographs, controlling baselines with absolute. La Cour magnetometer has following scale values: H 4.4gamma/mm, D 0.9min/mm, Z 6gamma/mm. Speed 15mm/h, continuous recording. The proton magnetometer records on special chart with speed 6 mm/h (variable). Scale value: 1.5gamma/mm, continuous recording. Absolute measurements are made regularly, at least once per week.

---------- Film, photographic paper (La Cour)
Strip charts (Proton magnetometer)
---------- Regular
AFTER ------ 1 MONTHS
---------- Tables with mean hourly values for D,H,Z,F, microfilm
---------- The results of Geomagnetic Data are published yearly in ANALES DE LAS OBSERVACIA, NES METEOROLOGICAS SEISMICAS Y MAGNETICAS. Available on scientific exchange basis or at a price of 200 pts year.
---------- Yes

---------- Charlottenlund, Denmark
---------- Yes
TATION ----- The Director
Instituto y Observatorio de Marina
San Fernando Cadiz
Spain

ATA -------- Same as above
il 1967 the Observatory recorded only D,H,
m 1967: H,D,Z; from 1975: H,D,Z,F.
iliary equipment: absolute measures with Pro-
Magnetometer and coil system. Declinometer
e KEW. Besides, the Observatory has an opti-
pumping magnetometer (Cesium and Rubidium
sor), with coil system, available to record
asionally F and H or Z with high sensitivity
1gamma/mm).

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D01 Geomagnetic Standard an

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MARION
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ITEM: 392
DATE:03/02/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 46.88
STATION LONGITUDE	E 37.85
ALTERNATE NAMES	
DATES OF OPERATION	06/1972 to present
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	Standard Magnetometer
RAW DATA	Photorecorded graphics
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Computer printouts
DATA ROUTINELY PUBLISHED	MAGNETIC OBSERVATORIES AT MARION published by Magnetic Obs (CSIR), P.O. Box 32, Hermanus 7200, Rep. of South Africa
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Gideon J. Kuhn Antarctic Geomagnetic and Aurora Prog P.O. Box 32 Hermanus Rep of So Africa 7200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MAWSON

ITEM: 691
DATE:21/06/75

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d and Rapid Run Measurements (Cont.)

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MAWSON
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ITEM: 692
DATE:21/06/75

DISCIPLINE ----------	DØ1 Geomag Standard and Rapid Run Measurements	
STATION LATITUDE ----------	S	67.60
STATION LONGITUDE ----------	E	62.86
ALTERNATE NAMES ----------		
DATES OF OPERATION ----------	Ø1/1969 to present	
OBSERVING SCHEDULE ----------	Regular	
INSTRUMENT DESCRIPTION -----	La Cour Magnetograph (sensitive), three components H, D, & Z, continuous recording 15mm/h.	
RAW DATA ----------	Photographic paper	
DATA REDUCTION PRACTICE ----------	None	
REGULAR REDUCED DATA AVAILABLE AFTER ------		MONTHS
FORM OF REDUCED DATA ----------		
DATA ROUTINELY PUBLISHED ----------		
DATA SENT TO WDC-A ----------		
DATA SENT TO WDC-B ----------		
DATA SENT TO WDC-C ----------		
DATA AVAILABLE ON REQUEST ----------	Yes	
ADDRESS FOR INFORMATION ABOUT STATION -----	Geophysical Observatory Group Bureau of Mineral Resources P.O. Box 378 Canberra City Australia	2601
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above	
ADDITIONAL COMMENTS -----		

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MBOUR
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ITEM: 1103
DATE:24/02/75

DISCIPLINE ----------	DØ1 Geomag Standard and Rapid Run Measurements	
STATION LATITUDE ----------	N	14.39
STATION LONGITUDE ----------	E	343.04

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MAWSON

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ITEM: 691
DATE:21/06/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	S 67.60
STATION LONGITUDE ----------	E 62.86
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1955 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour Magnetograph (normal), three components H, D, & Z, continuous recording 20 mm/h, twice weekly control observations.
RAW DATA ----------	Photographic paper
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	15 MONTHS
FORM OF REDUCED DATA ----------	Mean hourly values on magnetic tape and computer printouts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Geophysical Observatory Group Bureau of Mineral Resources P.O. Box 378 Canberra City Australia
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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MBOUR

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ITEM: 1103
DATE:24/02/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 14.39
STATION LONGITUDE ---------- E 343.04
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1950 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- La Cour Magnetometer (2) with weekly absolute measurements (use of Elsec proton magnetometer for H and Z), standard.
RAW DATA ---------- Photographic paper records, tables digitized data from 1971
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Tables, tape (1971 data onwards)
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Hans G. Barsczus
ORSTOM
B.P. 50
M Bour Senegal
West Africa

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- 1965-1970 data will be published this year hopefully
Main office is in France where digitized data are.

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D01 Geomagnetic Standard a

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MCMATH-HULBERT

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ITEM: 1101
DATE: 12/01/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 42.66
STATION LONGITUDE	E 276.74
ALTERNATE NAMES	
DATES OF OPERATION	03/1953 to present
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	Magnetic field measurements
RAW DATA	
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Orren C. Mohler McMath-Hulbert Observatory 895 Lake Angelus Road North Pontiac MI USA 48055
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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tic Standard and Rapid Run Measurements (Cont.)

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TE:12/01/76

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MEANOOK
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DISCIPLINE ----------	D01 Geomag Standard and Rapid R
STATION LATITUDE ----------	N 54.62
STATION LONGITUDE ----------	E 246.67
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	09/1931 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	AMOS (Automatic Magnetic Observ continuous recording of earths (north), Y(east), Z(vertical), of field recorded once per min netic tape with an analog outpu at 20 mm/h. Absolute observati tion) and I(inclination) and of are made once or twice a week.
RAW DATA ----------	Digital magnetic
DATA REDUCTION PRACTICE ----------	Regular , Sp
REGULAR REDUCED DATA AVAILABLE AFTER ------	18 MONTHS
FORM OF REDUCED DATA ----------	Digital magnetic microfilm
DATA ROUTINELY PUBLISHED ----------	Annual report av Physics Branch c parameters, mean mary
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Meanook Magnetic Athabasca P.O. Box 89 Alberta Canada
ADDRESS FOR INFORMATION ABOUT DATA --------	Div of Geomagnet Dept Energy, Min 1 Observatory Cr Ottawa O Canada
ADDITIONAL COMMENTS -----	Standard run 3 component Ruska Mag ble fluxgate magnetometer for abso vations; proton recession magnetom vation; digital recording commence Special purpose data available aft

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ITEM: 1104
DATE:02/06/75

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--- D01 Geomag Standard and Rapid Run Measurements
--- N 54.62
--- E 246.67

--- 09/1931 to present
--- Regular
--- AMOS (Automatic Magnetic Observatory System), continuous recording of earths magnetic field; X (north), Y(east), Z(vertical), F(total intensity) of field recorded once per min on digital magnetic tape with an analog output on strip chart at 20 mm/h. Absolute observation of D(declination) and I(inclination) and of total intensity F are made once or twice a week.
---------- Digital magnetic tape, strip chart
---------- Regular , Special
LABLE AFTER ------ 18 MONTHS
---------- Digital magnetic tape, tables, microfilm
---------- Annual report available from Earth Physics Branch contains instrument parameters, mean hourly value summary
---------- Yes

---------- Yes
BOUT STATION ----- Meanook Magnetic Observatory
Athabasca
P.O. Box 89
Alberta
Canada

BOUT DATA -------- Div of Geomagnetism, Earth Physics Br
Dept Energy, Mines and Resources
1 Observatory Cres.
Ottawa Ontario
Canada K1A 0Y3

Standard run 3 component Ruska Magnetograph; portable fluxgate magnetometer for absolute D.I. observations; proton recession magnetometer for F observation; digital recording commenced 11/1970.
Special purpose data available after 2 months.

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D01 Geomagnetic Standard a

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MEMAMBETSU
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ITEM: 395
DATE:23/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 43.91
STATION LONGITUDE	E 144.19
ALTERNATE NAMES	
DATES OF OPERATION	01/1952 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	MOP-75 (vector) proton magnetometer, DI-75 magnetometer theodolite, KM (H,D) and KZ (Z) variometers. Variometers: suspended bar-magnet type, continuous observation, 2.5 gamma/mm 20mm/h.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables, magnetic tape, micro-film, computer printouts
DATA ROUTINELY PUBLISHED	REPORT OF THE KAKIOKA MAGNETIC OBSERVATORY, annual report
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Kyoto, Japan
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	K. Kanagihara, Director Kakioka Magnetic Observatory Kakioka 595 Yasato-Machi Ibaraki-ken Japan 315-01
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Auxiliary equipment: MO II and GSI-I Magnetometer theodolite, Fluxgate magnetometer

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ITEM: 875

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ard and Rapid Run Measurements (Cont.)

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MIYAZU
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ITEM: 406
DATE:16/01/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE ----------	N 35.32
STATION LONGITUDE ----------	E 135.11
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1973 to present
OBSERVING SCHEDULE ----------	Occasional
INSTRUMENT DESCRIPTION ------	Fluxgate magnetometer, analogue data on chart speed 25mm/h.
RAW DATA ----------	Strip charts
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Microfilm or photographic pape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	H. Maeda Geophysical Institute Kyoto University Kyoto Japan 606
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	Special purpose data usually available after six months.

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MOSCOW
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ITEM: 855
DATE:00/00/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE ----------	N 55.41
STATION LONGITUDE ----------	E 37.41

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Auxiliary equipment: MO II and GSI-I Magnetometer theodolite, Fluxgate magnetometer

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MINSK PLESHCHENITSY
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ITEM: 375
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 53.90
STATION LONGITUDE ---------- E 27.50
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1961 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Standard Magnetometer 0-0.005 Hz, Rapid Run Magnetometer 0.001-0.100 Hz
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Yu. N. Kuznetsov
IGG, Acad. of Sciences Belorussian SS
Leninskiy Prospect 68
Minsk
USSR

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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MOSCOW
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ITEM: 855
DATE: 00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 55.41
STATION LONGITUDE	E 37.41
ALTERNATE NAMES	
DATES OF OPERATION	07/1919 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard and rapid run magnetometers
RAW DATA	Photorecorded graphics
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	35 mm microfilm of graphics
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. N. Zaitsev IZMIRAN P/O Akademgorodok Moscow USSR
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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D01 Geomagnetic Standard ar

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ITEM: 412
DATE:02/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 76.20
STATION LONGITUDE	E 240.60
ALTERNATE NAMES	
DATES OF OPERATION	07/1962 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ruska Magnetograph. Standard-run analogue recordings of the earths magnetic field. 3 photographic variometers continuously record the X(north), Y(east), Z(vertical) components of the field with a paper speed of 20 mm/h. Absolute observations of declination (D) and inclination (I) and of total intensity F, are made once a week.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Tables, digital magnetic tape, microfilm
DATA ROUTINELY PUBLISHED	Annual report available from Earth Physics Branch, contains instrument parameters, mean hourly value summary.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Div of Geomag, Earth Physics Branch Dept. Energy, Mines & Resources 1 Observatory Cres. Ottawa Ontario Canada K1A 0Y3
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	3-component recording fluxgate serves as stand-by and storm recorder. Pen and ink charts are at 20mm/h. Portable fluxgate magnetometer for absolute D,I observations. Proton precession magnetometer for F observations.

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etic Standard and Rapid Run Measurements (Cont.)

ITEM: 412
DATE:02/06/75

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components of
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DISCIPLINE	D01 Geomag Standard and Rapid
STATION LATITUDE	N 14.38
STATION LONGITUDE	E 121.02
ALTERNATE NAMES	
DATES OF OPERATION	11/1950 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	A set of Eschenhagen type var Instrument Corp. Magnetic ho Z elements from magnetograms. mal run magnetograph 20mm/h. tions done by using magnetome H elements while earth inducto ment for I. QHM & BMZ instrume used almost simultaneously fo vations for comparison. Absol are made twice a week usually
RAW DATA	Photographic pa
DATA REDUCTION PRACTICE	Regular ,
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONT
FORM OF REDUCED DATA	Computer print
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Commodore Jayme Bureau of Coast 421 Barraca St. Manila Philippines
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Auxiliary equipment: 6 QHM La Co one Earth Inductor (CIW), one ma Instr. Corp.), IBM clock for tim gap from June 1953 to December 19 1 because of lightning damage. data usually available after 1 m

Measurements (Cont.)

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ITEM: 421
DATE:17/03/75

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---------- D01 Geomag Standard and Rapid Run Measurements
DE ---------- N 14.38
UDE ---------- E 121.02
S ----------
TION ---------- 11/1950 to present
DULE ---------- Regular
CRIPTION ------ A set of Eschenhagen type variometers by RUSKA Instrument Corp. Magnetic hourly values of D, H, Z elements from magnetograms. Conventional normal run magnetograph 20mm/h. Absolute observations done by using magnetometer (RUSKA) for D & H elements while earth inductor M-9(RUSKA Instrument for I. QHM & BMZ instruments are also being used almost simultaneously for baseline observations for comparison. Absolute observations are made twice a week usually after 1700 LT.

---------- Photographic paper
PRACTICE ---------- Regular , Special
D DATA AVAILABLE AFTER -------- 6 MONTHS
D DATA ---------- Computer printouts
PUBLISHED ----------
DC-A ---------- Yes
DC-B ----------
DC-C ----------
ON REQUEST ---------- Yes
FORMATION ABOUT STATION ------ Commodore Jayme V. Presbitero, Director
Bureau of Coast and Geodetic Survey
421 Barraca St., San Nicolas
Manila
Philippines 2807

FORMATION ABOUT DATA ---------- Same as above
MENTS ------ Auxiliary equipment: 6 QHM La Cour, 2 BMZ La Cour, one Earth Inductor (CIW), one magnetometer (RUSKA Instr. Corp.), IBM clock for time flashes. Data gap from June 1953 to December 1954 for Z and 1 because of lightning damage. Special purpose data usually available after 1 month.

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D01 Geomagnetic Standard

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NAGYCENK
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ITEM: 425
DATE: 21/01/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 47.63
STATION LONGITUDE	E 16.72
ALTERNATE NAMES	
DATES OF OPERATION	08/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Earth currents recorder (made in Hungary), chart speed 2cm/h; La Cour magnetometer operating since 1960 measures geomagnetic field components with chart speed 1.5 cm/h.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables of hourly mean values, 3-hour indices of activity, etc.
DATA ROUTINELY PUBLISHED	Geophysical Observatory Reports, Observatory of Nagycenk MTA GGKI, H-S401 - Sopron, Pf. 5 Hungary
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. Adam MTA GGKI Muzeum - u. 6-8, P.O.B. 5 Sopron Hungary H-S401
ADDRESS FOR INFORMATION ABOUT DATA	Dr. J. Vero MTA GGKI Muzeum - u. 6-8, P.O.B. 5 Sopron Hungary H-S401
ADDITIONAL COMMENTS	Also recorded: ionospheric absorption, atmospheric electric potential gradient Pc1 pulsation (from 15/01/1976)

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etic Standard and Rapid Run Measurements (Cont.)

ITEM: 425
DATE:21/01/76

Run Measurements

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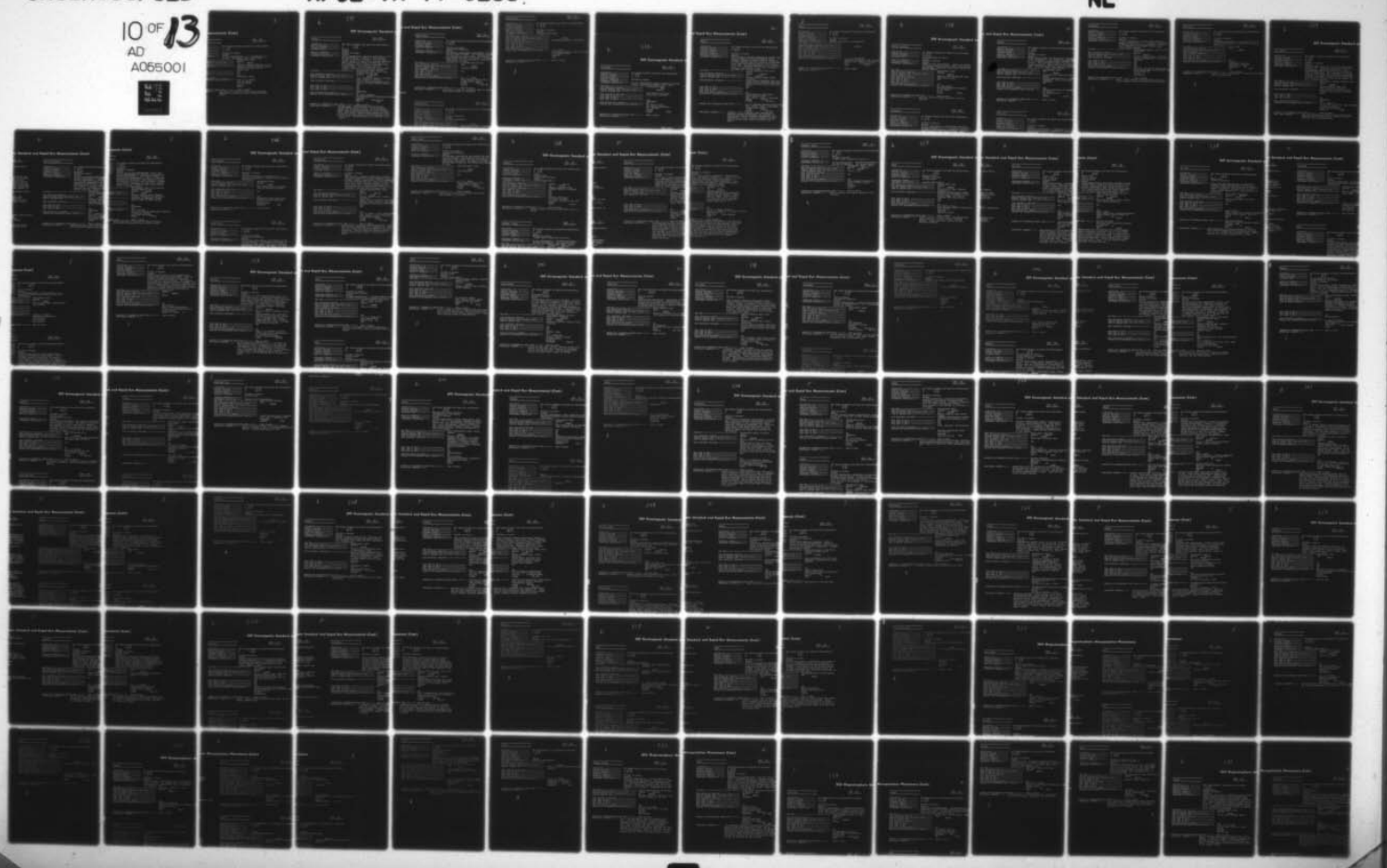
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NAIROBI
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DISCIPLINE	D01 Geomag Standard and Rap
STATION LATITUDE	S 1.33
STATION LONGITUDE	E 36.81
ALTERNATE NAMES	
DATES OF OPERATION	02/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour magnetometers H, D, iations, continuous, chart
RAW DATA	Photographic
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	18 MO
FORM OF REDUCED DATA	Tables of ho
DATA ROUTINELY PUBLISHED	Magnetic yea 1968-1972 av change basis
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Copenhagen
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. N. J. Univ of Nair P.O. Box 301 Nairobi Kenya
ADDRESS FOR INFORMATION ABOUT DATA	Same as abov
ADDITIONAL COMMENTS	QHMs 397 & 398, BMZ 170, Elree magnetometer, Geometrics proto ometer.

AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

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10 OF 13
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easurements (Cont.)

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ITEM: 428
DATE:13/05/75

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---------- D01 Geomag Standard and Rapid Run Measurements
---------- S 1.33
E ---------- E 36.81

ON ---------- 02/1964 to present
LE ---------- Regular
IPTION ------ La Cour magnetometers H, D, Z geomagnetic variations, continuous, chart speed 15mm/h.

---------- Photographic paper
RACTICE ---------- Regular
DATA AVAILABLE AFTER ------- 18 MONTHS
DATA ---------- Tables of hourly values of H, D, Z
UBLISHED ---------- Magnetic yearbook (monthly tables) 1968-1972 available on exchange basis

-A ---------- Yes
-B ---------- Yes
-C ---------- Yes
Copenhagen· Kyoto

N REQUEST ----------
RMATION ABOUT STATION ------ Prof. N. J. Skinner
Univ of Nairobi
P.O. Box 30197
Nairobi
Kenya

RMATION ABOUT DATA --------- Same as above
NTS ------ OHMs 397 & 398, BMZ 170, Elree proton precision magnetometer, Geometrics proton precision magnetometer.

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331

D01 Geomagnetic Standard a

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NIEMEGK
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ITEM: 1009
DATE:18/03/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 52.07
STATION LONGITUDE	E 12.68
ALTERNATE NAMES	Potsdam Seddin
DATES OF OPERATION	01/1890 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Proton Magnetometer, Rapid Run Magnetometer, Normal Magnetometer: 3 systems; 1 storm system; 22 mm/h or 60 mm/h, 2 nT/mm or 0.31 mm, Earth current (geogr. E-W and N-S) 3 systems with 200 m 1000 m and 30 km or 40 km; 20 mm/h about 0.2 - 0.5 mV/km/mm; X,Y,Z 6 mm/min or 20 mm/min 0.02; 0.002 nT/s/mm. Earth current (1000 m) 6 mm/min about 0.1 - 0.2 mV/km/mm; Proton Magnetometer, F Z Y Monthly Review and yearbook.
RAW DATA	Photographic paper, strip chart, digital magnetic tape
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	List, microfilm, magnetic and pape tape, computer printouts
DATA ROUTINELY PUBLISHED	Monthly Review and Magnetic Yearbook of the Adolf-Schmidt-Observatory
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Copenhagen
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Klaus Lengning Adolf-Schmidt-Obs Erdmagnetismus Niemeg Lindenstr. 7 Niemegk Kreis Belzig DDR 1824
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station moved: 1/1890 Potsdam (N52.38 E13.07), 01/1908 Seddin (N52.28 E13.02), 01/1932 Niemegk. Normal Reg. and Earth currents are on photographic paper, Proton Magnetometer data on digital (1 date/ 60 s) strip chart, Induction Magnetometer and Earth current on digital magnetic tape (10 dates/s) on the 3 world days. Special purpose data available after 1 month.

d and Rapid Run Measurements (Cont.)

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NORWAY HOUSE
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ITEM: 443
DATE:09/02/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 53.98
STATION LONGITUDE	E 262.17
ALTERNATE NAMES	
DATES OF OPERATION	01/1972 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	EDA fluxgate magnetometer (variometer) with ch (scratch type) recorder. The magnetic variati are recorded on a strip chart. No absolute measurements are made. The speed is 72 mm/h a scale value is 4.76 nt/mm when the microfilm i increased by 12 times.
RAW DATA	35 mm YEW scratch film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Microfilm copies
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. J. K. Walker Earth Physics Branch, EMR 1 Observatory Cresent Ottawa Ontario Canada KIA OYB
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The station is part of a meridian chain of statio which goes through Ft. Churchill.

Niemegk

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NOVOKAZALINSK
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ITEM: 834
DATE:00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 45.76
STATION LONGITUDE	E 62.12
ALTERNATE NAMES	
DATES OF OPERATION	07/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard Magnetometer
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Photographic prints, black/whi
DATA ROUTINELY PUBLISHED	

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NOVOKAZALINSK

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ITEM: 834

DATE:00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 45.76
STATION LONGITUDE	E 62.12
ALTERNATE NAMES	
DATES OF OPERATION	07/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard Magnetometer
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Photographic prints, black/white
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	M. P. Rudina Ionospheric Section, Acad Sci of Kaz 68 Kamenskoe Plato Alma-Ata USSR
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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332

D01 Geomagnetic Standard a

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NY-ALESUND
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ITEM: 445
DATE:26/01/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 78.92
STATION LONGITUDE ---------- E 11.93
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1966 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- La Cour Magnetometer, Medium sensitivity 10g/mm, 15mm/h. Absolute measurement once a year.
RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------

Only annual quiet means
DATA ROUTINELY PUBLISHED ---------- Microfilm of records
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Copenhagen
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Asgeir Brekke
The Auroral Observatory
P.O. Box 953
Tromso
Norway N9001

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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ITEM: 829
DATE:00/00/75

nd Rapid Run Measurements (Cont.)

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OTTAWA
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ITEM: 450
DATE:02/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 45.40
STATION LONGITUDE	E 284.45
ALTERNATE NAMES	
DATES OF OPERATION	07/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	AMOS (Automatic Magnetic Observatory System) continuous recording of Earths magnetic field. X(North) Y(East) Z(vertical) F(total intensity) of field recorded once per minute on digital magnetic tape with analogue output on strip chart at 20 mm/h. Absolute observation of D (declination), I (inclination) and of total intensity F are made once or twice a week.
RAW DATA	Digital magnetic tape, strip charts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Digital magnetic tape, tables, microfilm
DATA ROUTINELY PUBLISHED	Annual Report available from Earth Physics Branch contains instrument parameters, mean hourly value summary.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Ottawa Magnetic Observatory Earth Physics Branch Dept. Energy, Mines, & Resources Ottawa Ontario Canada K1A OY3
ADDRESS FOR INFORMATION ABOUT DATA	Div of Geomagnetism/Earth Physics Bra Dept. Energy, Mines, & Resources 1 Observatory Cresent Ottawa Ontario Canada K1A OY3
ADDITIONAL COMMENTS	Standard - run 3 component Ruska magnetograph, Portable fluxgate magnetometer for absolute D.I. observations, Proton recession magnetometer for F observation, Digital recording commenced 09/1970. Special purpose data usually available after 2 months.

ADDITIONAL COMMENTS -----

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ODESSA

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ITEM: 829

DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 46.78
STATION LONGITUDE ---------- E 30.88
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1896 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Standard and rapid run magnetometer
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. A. P. Bondarenko
Mathematical Physics, Inst for Math
Ukranian SSR Academy of Sciences
Lvov Jaroslavenco 27
USSR 29001

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS -----

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D01 Geomagnetic Standard an

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PAPEETE (PAMATAI)
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ITEM: 456
DATE:20/02/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	S 17.55
STATION LONGITUDE ----------	E 188.23
ALTERNATE NAMES ----------	Obs geophysique de Tahiti Tahiti
DATES OF OPERATION ----------	02/1966 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Normal La Cour magnetometer. Control of baseline with Askania Dmter, Askania Imeter, Elsec proton magnetometer, Helmholtz coils system (Nelson and Searson method).
RAW DATA ----------	Photographic paper
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Magnetic tape (24 data per hour)
DATA ROUTINELY PUBLISHED ----------	Mean hourly values
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Mr. Jean Aubrat Bureau geophysique de lOrstom 24 rue Bayard Paris France 75008
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data are reduced and made available as soon as possible.

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PARAMARIBO
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ITEM: 458
DATE:15/05/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 5.81
STATION LONGITUDE ----------	E 304.79
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1958 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour magnetometers, normal speed recording. Magnetic elements D, H, Z. Continuous recording of magnetic declinations, horizontal - and vertical component, chart speed 15 mm/h, scale

d and Rapid Run Measurements (Cont.)

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PENDELI
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ITEM: 35
DATE:08/07/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 38.05
STATION LONGITUDE ---------- E 23.86
ALTERNATE NAMES ---------- Athens
DATES OF OPERATION ---------- 01/1958 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Normal Magnetograph, one declinometer (belongi to an old magnetic travel theodolite SARTORIUS for D, 2 magnetic field balances (ASKANIA) for H and Z. All instruments adapted for photographic recording. Weekly care of the Observatory. The same schedule for absolute measurements (D, H, I). Chart speed 20 mm/h.
RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Microfilm (not regularly scheduled)
DATA ROUTINELY PUBLISHED ---------- Monthly bulletins for 3 h range geomagnetic indices and rapid phenomena
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Magnetic Observatory of Pendeli
N.I.G.M.R.
34, Veranzerou Str.
Athens
Greece TT 102

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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POKER FLAT
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ITEM: 468
DATE:10/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 65.13
STATION LONGITUDE ---------- E 212.52
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 11/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Schonstedt magnetometer, 3 components H, D, Z, measured continuously, recorded on 4 inch/hour strip chart

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PARAMARIBO

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ITEM: 458

DATE:15/05/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 5.81
STATION LONGITUDE	E 304.79
ALTERNATE NAMES	
DATES OF OPERATION	01/1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour magnetometers, normal speed recording. Magnetic elements D, H, Z. Continuous recording of magnetic declinations, horizontal - and vertical component, chart speed 15 mm/h, scale value roughly 5nT/min.
RAW DATA	Photographic papers, digital magnetic tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Tables, magnetic tape, microfilm
DATA ROUTINELY PUBLISHED	Yearbook Geomagnetism, Paramaribo, 1958-1967
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Director, Division of Geophysics Royal Netherlands Meteorological Inst Utrechtseweg 297 De Bilt Netherlands
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Hourly, daily, monthly, and yearly mean values on digital magnetic tape are retained at the station.

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POKER FLAT

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ITEM: 468

DATE:10/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 65.13
STATION LONGITUDE ---------- E 212.52
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 11/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Schonstedt magnetometer, 3 components H, D, Z, measured continuously, recorded on 4 inch/hour strip chart

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Station is part of University of Alaska N-S meridian chain thru Fairbanks.

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D01 Geomagnetic Standard an

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PORT ALFRED
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ITEM: 127
DATE:05/03/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 46.43
STATION LONGITUDE	E 51.87
ALTERNATE NAMES	Crozet
DATES OF OPERATION	01/1974 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Fluxgate magnetometer (H, D, Z) and proton magnetometer (F). Magnetic variations and absolute measurements. The system includes a 3 axis Fluxgate Magnetometer to which a proton magnetometer is associated. The recording is done continuously on 2 strip chart recorders (5 gamma/mm, 20 mm/h; 2 gamma/mm, 51 mm/h) and on digital magnetic tape at a scanning rate of one reading (H, D, Z, F) every minute.
RAW DATA	Strip chart, digital magnetic tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables, magnetic tape, computer print-out, microfilm
DATA ROUTINELY PUBLISHED	Fascicule de L institut de Physique du Globe de Paris (yearly issue)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Copenhagen
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. R. Schlich I.P.G.P Serv. des Obser. Mag. Austraux 4 avenue de Neptune Saint Maur des Fosses France 94100
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data are available as tables of hourly mean values, magnetic tape of minute values, computer printout, microfilm (La Cour magnetograms).

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tic Standard and Rapid Run Measurements (Cont.)

EM: 127
TE:05/03/75

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microfilm
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Paris (yearly

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PORT AUX FRANCAIS
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DISCIPLINE ----------	D01 Geomag Standard and Rapid R
STATION LATITUDE ----------	S 49.35
STATION LONGITUDE ----------	E 70.21
ALTERNATE NAMES ----------	Kerguelen
DATES OF OPERATION ----------	09/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour and Fluxgate Magnetomet Proton magnetometer (F), magnet absolute measurements. The sys axis Fluxgate magnetometer to w netometer is associated. The r continuously on 2 strip chart r mm, 20 mm/h; 2 gamma/mm, 51 mm/ magnetic tape at a scanning rat (H, D, Z, F) every minute.
RAW DATA ----------	Photographic pap digital magnetic
DATA REDUCTION PRACTICE ----------	Special , Re
REGULAR REDUCED DATA AVAILABLE AFTER ------	12 MONTHS
FORM OF REDUCED DATA ----------	Tables, magnetic printout, microf
DATA ROUTINELY PUBLISHED ----------	Fascicule de lIN IQUE DU GLOBE DE
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes Copenhagen
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. R. Schlich IPGP, Serv des O 4 Avenue de Nept Saint Maur des F France
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Reduced data are in the form of ta mean values and magnetic tape of m

rements (Cont.)

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ITEM: 305
DATE:05/03/75

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----- D01 Geomag Standard and Rapid Run Measurements
----- S 49.35
----- E 70.21
----- Kerguelen
----- 09/1957 to present
----- Regular
----- La Cour and Fluxgate Magnetometer (H,D,Z) and Proton magnetometer (F), magnetic variations and absolute measurements. The system includes a 3 axis Fluxgate magnetometer to which a proton magnetometer is associated. The recording is done continuously on 2 strip chart recorders (5 gamma/mm, 20 mm/h; 2 gamma/mm, 51 mm/h) and on digital magnetic tape at a scanning rate of one reading (H, D, Z, F) every minute.

---------- Photographic paper, strip charts, digital magnetic tape

---------- Special , Regular

AILABLE AFTER ------ 12 MONTHS

---------- Tables, magnetic tape, computer printout, microfilm (La Cour mag.)

D ---------- Fascicule de lINSTITUT DE PHYSIQUE DU GLOBE DE PARIS (annual)

---------- Yes
Copenhagen

ST ---------- Yes

ABOUT STATION ----- Dr. R. Schlich
IPGP, Serv des Obs Magnetiques Austraux
4 Avenue de Neptune
Saint Maur des Fosses
France 94100

ABOUT DATA -------- Same as above

-- Reduced data are in the form of tables of hourly mean values and magnetic tape of minute values.

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D01 Geomagnetic Standard ar

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PORT MORESBY
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ITEM: 472
DATE:23/06/75

DISCIPLINE	DØ1 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 9.42
STATION LONGITUDE	E 147.15
ALTERNATE NAMES	
DATES OF OPERATION	Ø4/1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour Magnetograph, 3 components H, D, Z. Continuous recording 15 mm/hour, weekly control observations.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Mean hourly values on magnetic tape and computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Geophysical Observatory Group Bureau of Mineral Resources P.O. Box 378 Canberra City Australia 2601
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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RANKIN INLET
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ITEM: 484
DATE:12/02/76

DISCIPLINE	DØ1 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 62.63
STATION LONGITUDE	E 268.08
ALTERNATE NAMES	
DATES OF OPERATION	Ø7/1972 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	EDA Fluxgate magnetometer (variometer) and YEW scratch recorder. The magnetic variations are recorded on 35mm scratch film but no absolute measurements are taken. The speed is 72 mm/h, and the scale values are 4.76 nT/mm when blown up

and Rapid Run Measurements (Cont.)

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RESOLUTE BAY
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ITEM: 487
DATE:05/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 74.60
STATION LONGITUDE	E 265.10
ALTERNATE NAMES	Resolute
DATES OF OPERATION	11/1953 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	AMOS (Automatic Magnetic Observatory System), continuous recording of earths magnetic field. X (north), Y(east), Z(vertical), F(total intensity) of field recorded once per minute on digital magnetic tape, with an analogue output on strip chart at 20 mm/h. Absolute observation of D (declination) and I (inclination) and of total intensity F are made once or twice a week.
RAW DATA	Digital magnetic tape, strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Digital magnetic tape, tables, microfilm
DATA ROUTINELY PUBLISHED	Annual report available from Earth Physics Branch contains instrument parameters, mean hourly value summary
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Div. of Geomag., Earth Physics Bra Dept. Energy, Mines & Resources 1 Observatory Cresent Ottawa Ontario Canada KIA OY3
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Standard-run 3 component Ruska magnetograph. Portable fluxgate magnetometer for absolute D.I. observations. Proton precession magnetometer for F observations. Digital recording commenced 09/1973. Special purpose data usually available after 2 months.

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RANKIN INLET
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ITEM: 484
DATE:12/02/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 62.63
STATION LONGITUDE ---------- E 268.08
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1972 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- EDA Fluxgate magnetometer (variometer) and YEW scratch recorder. The magnetic variations are recorded on 35mm scratch film but no absolute measurements are taken. The speed is 72 mm/h, and the scale values are 4.76 nT/mm when blown up 12 times.

RAW DATA ---------- 35mm YEW scratch film
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- 35mm microfilm
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. J. K. Walker
Earth Physics Branch, EMR
1 Observatory Cresent
Ottawa Ontario
Canada KIA 073

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ------ The station is part of a meridian chain which goes through Ft. Churchill.

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D01 Geomagnetic Standard a

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ROBURENT
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ITEM: 490
DATE:13/03/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 44.30
STATION LONGITUDE	E 7.88
ALTERNATE NAMES	B-280
DATES OF OPERATION	Station moved Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour Magnetometer
RAW DATA	
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	MAGNETIC BULLETIN - Roburent
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Istituto Geofisico Universita di Genova Via Balbi, 30-23-P.O. Box 3145 Genova Italy I-16100
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data usually available after 12 months.

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RUAMPARA - BUNIA
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ITEM: 77
DATE:12/05/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 1.53
STATION LONGITUDE	E 30.02
ALTERNATE NAMES	Bunia
DATES OF OPERATION	06/1958 to present 7/1960-7/1967 intermittent operation
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	La Cour Magnetometer. Standard measurements. 3x8 BMZ 3x1 QHM/week. 2xI (Askania)/month.
RAW DATA	Photographic paper, tables
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	12 , MONTHS

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ic Standard and Rapid Run Measurements (Cont.)

EM: 490
TE:13/03/75

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EM: 77
TE:12/05/75

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SABHAWALA
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DISCIPLINE ----------	D01 Geomag Standard and Rapid
STATION LATITUDE ----------	N 30.37
STATION LONGITUDE ----------	E 77.80
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1964 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	D, H, and Z Askania vaiometers the 3 geomagnetic elements, D, tinuously recorded, along with whose values are determined se elements are recorded on a sin paper at a chart speed of 20mm
RAW DATA ----------	Photographic pa
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	12 MONTH
FORM OF REDUCED DATA ----------	Computer printo
DATA ROUTINELY PUBLISHED ----------	INDIAN MAGNETIC annually by the Inst of Geomag, 400 005, India ly Bulletins by India, Dehra Du
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. R. S. Chugh Geodetic & Res Post Box No. 7 Dehra Dun India
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	An underground Magnetic Observat India compound at Dehra Dun had and was put out of action in 194 ments were damaged due to floodi ground chambers. Baseline contr tion records is provided by the QHM, BMZ and Survey of India Pat Published data are monthly table values of the 3 elements D,H,Z, storm statistics.

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ents (Cont.)

ITEM: 493
DATE:05/06/75

D01 Geomag Standard and Rapid Run Measurements
N 30.37
E 77.80

01/1964 to present
Regular
D, H, and Z Askania vaiometers. Variations of the 3 geomagnetic elements, D, H, and Z, are continuously recorded, along with baselines whose values are determined separately. All 3 elements are recorded on a single photographic paper at a chart speed of 20mm/h.

---------- Photographic paper
---------- Regular
E AFTER ------ 12 MONTHS
---------- Computer printouts
---------- INDIAN MAGNETIC DATA, published annually by the Director, Indian Inst of Geomag, Colaba, Bombay 400 005, India and in the yearly Bulletins by the Survey of India, Dehra Dun, U. P.

---------- Yes
STATION ----- Dr. R. S. Chugh, Director
Geodetic & Research Br, Survey of India
Post Box No. 77
Dehra Dun Uttar Pradesh
India

DATA -------- Same as above

n underground Magnetic Observatory in the Survey of ndia compound at Dehra Dun had functioned from 1902 nd was put out of action in 1943 because instruents were damaged due to flooding of its underround chambers. Baseline control for the variaion records is provided by the observations with HM, BMZ and Survey of India Pattern Magnetometer. ublished data are monthly tables of mean hourly alues of the 3 elements D,H,Z, and magnetic torm statistics.

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RUAMPARA - BUNIA

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ITEM: 77
DATE:12/05/75

DISCIPLINE ----------	DØ1 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 1.53
STATION LONGITUDE ----------	E 30.02
ALTERNATE NAMES ----------	Bunia
DATES OF OPERATION ----------	Ø6/1958 to present 7/1960-7/1967 intermittent operation
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION -----	La Cour Magnetometer. Standard measurements. 3x8 BMZ 3x1 QHM/week. 2xI (Askania)/month.
RAW DATA ----------	Photographic paper, tables
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	12 , MONTHS
FORM OF REDUCED DATA ----------	Tables, Films
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Bunia Ruampara Observatory Service Meteo Du Zaire Binza Kinshasa Zaire
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data usually available after 3 months.

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D01 Geomagnetic Standard a

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SANAE
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ITEM: 530
DATE:05/02/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 70.32
STATION LONGITUDE	E 357.66
ALTERNATE NAMES	Norway Station
DATES OF OPERATION	01/1960 to present Station moved
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	Standard Magnetometer
RAW DATA	Punched paper tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Punched paper tape, computer printouts
DATA ROUTINELY PUBLISHED	MAGNETIC OBSERVATIONS AT SANAE, published by the Magnetic Observatory (CSIR), P.O. Box 32, Hermanus 7200, South Africa
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Gideon J. Kuhn AGAP, Hermanus Magnetic Observatory P.O. Box 32 Hermanus Rep of So Africa
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Norway Station (-70.50, 357.47), 01/1960-02/1962. Sanae (old site) (-70.30, 357.63), 06/1962-02/1971. Sanae (new site) (-70.32, 357.66), 06/1971 to present.

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ic Standard and Rapid Run Measurements (Cont.)

M: 530
E:05/02/76

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netic Observatory

1960-02/1962.
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357.66),

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DISCIPLINE ----------	D01 Geomag Standard and Rapid
STATION LATITUDE ----------	N 18.12
STATION LONGITUDE ----------	E 293.85
ALTERNATE NAMES ----------	Puerto Rico
DATES OF OPERATION ---------	1903 to present Station moved
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	Normal magnetograph, continuou changed daily. Suspension Rus H and D, modified La Cour vari mm/hour photographic chart spe ly or twice weekly with Proton ter and Ruska suspension magne
RAW DATA ----------	Photo paper rec ings in tabular
DATA REDUCTION PRACTICE ----------	Regular , S
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTH
FORM OF REDUCED DATA ----------	Printouts of ho film, digital p
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	John D. Wood USGS, Theoretic Denver Federal Denver USA
ADDRESS FOR INFORMATION ABOUT DATA --------	William Paulish WDC-A for Solar c/o NOAA-EDS Boulder USA
ADDITIONAL COMMENTS -----	Magnetograph will be replaced wit system recording variations in D, tally on magnetic tape soon. Old (N18.38 E293.88) operated 1926-64 placed Vieques, Puerto Rico, (N18 ating from 1903-1924. Special pu available after 1 month. 2.5 min available for some intervals.

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ITEM: 538
DATE:17/04/75

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D01 Geomag Standard and Rapid Run Measurements
N 18.12
E 293.85
Puerto Rico
1903 to present
Station moved
Regular
Normal magnetograph, continuous recording records changed daily. Suspension Ruska variometers for H and D, modified La Cour variometer for Z, 20 mm/hour photographic chart speed, absolutes weekly or twice weekly with Proton Vector magnetometer and Ruska suspension magnetometer for D.

---------- Photo paper recordings, mm scalings in tabular form

---------- Regular , Special

LE AFTER ------ 2 MONTHS

---------- Printouts of hourly values, microfilm, digital printouts

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---------- Yes

---------- Yes

T STATION ----- John D. Wood
USGS, Theoretical & Applied Geophysics
Denver Federal Center, Bldg. 25
Denver CO
USA 80225

T DATA -------- William Paulishak
WDC-A for Solar-Terrestrial Physics
c/o NOAA-EDS
Boulder CO
USA 80302

Magnetograph will be replaced with proton-fluxgate system recording variations in D, H, Z and F digitally on magnetic tape soon. Old San Juan station (N18.38 E293.88) operated 1926-64. Old San Juan replaced Vieques, Puerto Rico, (N18.15 E294.55) operating from 1903-1924. Special purpose data usually available after 1 month. 2.5 min digital values available for some intervals.

1 338

D01 Geomagnetic Standard a

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SAN JUAN
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ITEM: 539
DATE:17/04/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 18.12
STATION LONGITUDE ---------- E 293.85
ALTERNATE NAMES ---------- Puerto Rico
DATES OF OPERATION ---------- 07/1957 to present.
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- Ruska Rapid Run Magnetograph, continuous recording, records changed daily. Photo paper recording @ 4mm/min, each component on separate record. Suspension variometers for H and D, Ruska Schmidt balance for Z. Each record in 30 cm X 50 cm.

RAW DATA ---------- Photo paper recordings
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Photo paper copies, microfilm copies

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------

ADDRESS FOR INFORMATION ABOUT STATION -----
John D. Wood
USGS, Theoretical & Applied Geophysics
Denver Federal Center, Bldg. 25
Denver CO
USA 80225

ADDRESS FOR INFORMATION ABOUT DATA --------
William Paulishak
WDC-A for Solar-Terrestrial Physics
c/0 NOAA - EDS
Boulder CO
USA 80225

ADDITIONAL COMMENTS ----- Magnetograph may be replaced sometime in 1975-76 with a proton-fluxgate system recording variations in H, D, Z, & F digitally on magnetic tape. Special purpose data usually available after 1 month.

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ic Standard and Rapid Run Measurements (Cont.)

1: 539
3:17/04/75

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1 month.

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DISCIPLINE	D01 Geomag Standard and Rapid Ru
STATION LATITUDE	S 77.81
STATION LONGITUDE	E 166.76
ALTERNATE NAMES	
DATES OF OPERATION	1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour magnetograph. Hourly va Instrument and observing schedul Christchurch.
RAW DATA	Photographic pape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Photographic pape tape, tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Officer in Charge Geophysical Obser P.O. Box 2111 Christchurch New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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SEOUL
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DISCIPLINE	D01 Geomag Standard and Rapid Ru
STATION LATITUDE	N 37.23
STATION LONGITUDE	E 126.57
ALTERNATE NAMES	
DATES OF OPERATION	01/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	V-4939 Cesium digital station ma Standard and Rapid Run Measureme strument measures variation of t total magnetic field intensity. field data are displayed directl 5-digit display window. The leas gits are converted to an analog cording on a potentiometric stri Observing schedule: 24 hours co

ements (Cont.)

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ITEM: 544
DATE:01/08/75

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---- D01 Geomag Standard and Rapid Run Measurements
---- S 77.81
---- E 166.76

---- 1957 to present
---- Regular
---- La Cour magnetograph. Hourly values X, Y, F. Instrument and observing schedule same as for Christchurch.
---------- Photographic paper
---------- Regular
ILABLE AFTER ------ 6 MONTHS
---------- Photographic paper, punched paper tape, tables

T ----------
ABOUT STATION ----- Officer in Charge
Geophysical Observatory
P.O. Box 2111
Christchurch
New Zealand

ABOUT DATA -------- Same as above
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ITEM: 550
DATE:07/04/75

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----- D01 Geomag Standard and Rapid Run Measurements
----- N 37.23
----- E 126.57

----- 01/1975 to present
----- Regular
----- V-4939 Cesium digital station magnetometer. Standard and Rapid Run Measurements. This instrument measures variation of the earths total magnetic field intensity. The magnetic field data are displayed directly in gammas in a 5-digit display window. The least significant digits are converted to an analog voltage for recording on a potentiometric strip chart recorder.

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SEOUL
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ITEM: 550
DATE:07/04/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 37.23
STATION LONGITUDE ----------	E 126.57
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1975 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	V-4939 Cesium digital station magnetometer. Standard and Rapid Run Measurements. This instrument measures variation of the earths total magnetic field intensity. The magnetic field data are displayed directly in gammas in a 5-digit display window. The least significant digits are converted to an analog voltage for recording on a potentiometric strip chart recorder. Observing schedule: 24 hours continuously.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	The Director Radio Research Laboratory *Ministry of* Telecommunications Seoul (Anyang) Republic of Korea 171
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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1 339

D01 Geomagnetic Standard a

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SHILLONG
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ITEM: 552
DATE:05/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 25.57
STATION LONGITUDE	E 91.88
ALTERNATE NAMES	
DATES OF OPERATION	01/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	A set of D, H, and Z magnetographs by La Cour. Variations of the 3 geomagnetic elements; D, H, and Z are continuously recorded, along with baselines whose values are determined separately. All 3 elements are recorded on a single photographic paper at a chart speed of 15mm/hour.
RAW DATA	Photographic paper, microfilm
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Monthly tables in computer printouts
DATA ROUTINELY PUBLISHED	INDIAN MAGNETIC DATA, published annually by the Director, Indian Inst of Geomagnetism, Colaba, Bombay 400 005, India. Monthly tables-mean hrly values, and magnetic storm statistics
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. B. N. Bhargava, Director Indian Institute of Geomagnetism Dr. Nanabhai Moos Marg Colaba, Bombay Maharashtra India 400 005
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The baseline determinations for H, Z are done by daily observations of absolute H, Z with QHM, BMZ respectively; for D, by observation of absolute D with QHM once a week on Wednesday at about local noon. The observed absolute values are periodically standardized by intercomparison with those at Alibag, using a set of QHM and BMZ as touring standards.

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ITEM: 554
DATE:13/03/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- S 76.00
STATION LONGITUDE ---------- E 276.00
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 12/1970 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Fluxgate Magnetometer. 2 second samples of da
on digital tape; also performance parameter.
RAW DATA ---------- Digital magnetic tape, 2 s
pts, 7 track, 556 bpi
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Same as raw data
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. L. J. Lanzerotti
Bell Laboratories
Murray Hill NJ
USA

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Station is conjugate to Northern Hemisphere.
Special purpose data usually available after 12
months.

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ITEM: 557
DATE:12/02/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 57.06
STATION LONGITUDE ---------- E 224.67
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 03/1902 to present
Station moved
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Standard Magnetometer
RAW DATA ---------- Photorecorded graphics, digital
magnetic tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, magnetic tape, photore

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SITKA

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ITEM: 557

DATE:12/02/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 57.06
STATION LONGITUDE	E 224.67
ALTERNATE NAMES	
DATES OF OPERATION	03/1902 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard Magnetometer
RAW DATA	Photorecorded graphics, digital magnetic tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, magnetic tape, photorecorded graphics
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Arthur W. Green USGS, Denver Federal Center Mail Stop 964, Box 25046 Denver CO USA 80225
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Prior to 1940 that Sitka absolute piers were located at N57.06 and E224.33. WDC-A furnishes Sitka data in hourly value tables, hourly values on magnetic tape and copies of magnetograms.

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D01 Geomagnetic Standard a

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SOUTH GEORGIA
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ITEM: 567
DATE:25/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 54.28
STATION LONGITUDE	E 323.52
ALTERNATE NAMES	King Edward Point
DATES OF OPERATION	01/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour Magnetometer: E.D.A. Fluxgate. Continuous recording of 3 components of magnetic field. La Cour, sensitivity about 3.5 g/mm, chart speed 15mm/h. E.D.A. fluxgate, recording H, D, Z, sensitivity about 15 g/mm switching automatically to 30 g/mm in large storms. (From 03/1971 records were produced by a S.R.D.E. fluxgate. The stability of both scale value and baseline of this instrument is very poor).
RAW DATA	Photographic paper (La Cour), strip chart (fluxgate)
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	9-24 MONTHS
FORM OF REDUCED DATA	Computer printouts, magnetic tape, microfilm
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Denmark, Japan
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	W. M. Sievwright British Antarctic Survey Drummond Street Edinburgh Scotland EH8 9UA
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Control by QHM, BMZ, and PPM. Station records from 03/1971 are available but stability of instrument then in use was very poor. Special purpose data usually available after 1 month (K indices).

rd and Rapid Run Measurements (Cont.)

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SOUTH UIST
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ITEM: 572
DATE:01/07/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 57.36
STATION LONGITUDE ----------	E 352.61
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1969 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Earth current observatory. Measurement of N-S and E-W electric fields at earths surface. Geomagnetic variations in the period range 0.1 to 200 seconds FM recorded on magnetic tape fr electrodes buried in earth.
RAW DATA ----------	Analog magnetic tape
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Computer printouts of e.g. spec tral analysis of selected event
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. David Orr University of York, Physics Dep York England YO1 5DD
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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D01 Geomagnetic Standard a

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ST. JOHNS
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ITEM: 576
DATE:05/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 47.60
STATION LONGITUDE	E 307.32
ALTERNATE NAMES	
DATES OF OPERATION	08/1968 to present
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	AMOS (Automatic Magnetic Observatory System). Digital recording of earths magnetic field. X (north), Y(east), Z(vertical), F(total intensity) of field recorded once per minute on digital magnetic tape with analogue output on strip chart at 20 mm/h. Absolute observations of D(declination) and I(inclination) and of total intensity F are made once a week.
RAW DATA	Digital magnetic tape, strip charts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Digital magnetic tape, tables, microfilm
DATA ROUTINELY PUBLISHED	Annual report available from Earth Physics Branch contains instrument parameters, mean hourly value summary
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Div of Geomag, Earth Physics Branch Dept of Energy, Mines & Resources 1 Observatory Cres. Ottawa Ontario Canada KIA OY3
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	3 component recording fluxgate serves as stand-by and storm recorder. Pen and ink charts are at 20 mm/h. Portable fluxgate magnetometer for absolute D.I. observations. Proton precession magnetometer for F observations. Digital recording commenced 12/1969. Photographic recording was discountinued 08/1972. Special purpose data usually available after 2 months.

rd and Rapid Run Measurements (Cont.)

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STONYHURST
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ITEM: 577
DATE:07/05/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE	N 53.84
STATION LONGITUDE	E 357.53
ALTERNATE NAMES	
DATES OF OPERATION	1865 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour magnetometer. Standard magnetometer. Normal run magnetograph; D, H, Z, continuous monitoring 15 mm/h.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	The Headmaster Stonyhurst College Whalley Blackburn Lancashire United Kingdom BB6 9PZ
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station operated from 1865-1941 and from 1961 on Some microfilms at WDCs. Some older records archived by IGS (as Hartland q.v.).

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SVERDLOVSK
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ITEM: 866
DATE:00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE	N 56.82
STATION LONGITUDE	E 60.60
ALTERNATE NAMES	
DATES OF OPERATION	01/1929 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Standard and scalar field magnetometers
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	16 mm microfilm of graphics

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SVERDLOVSK
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ITEM: 866
DATE: 00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 56.82
STATION LONGITUDE ---------- E 60.60
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1929 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ *Standard and scalar field magnetometers*
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- 16 mm microfilm of graphics
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. V. M. Mishin
SibIZMIR
P.O.B. 4
Irkutsk
USSR 33

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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D01 Geomagnetic Standard a

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TEHRAN
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ITEM: 756
DATE:00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 35.70
STATION LONGITUDE	E 51.40
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Magnetic Field measurements
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Reports
DATA ROUTINELY PUBLISHED	JOURNAL OF EARTH AND SPACE PHYSICS (Tehran Univ.), also monthly and yearly reports
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Hossein Keshi Afshar Institute of Geophysics Tehran University Amirabad Tehran Iran
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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TENERIFE
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ITEM: 599
DATE:10/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 28.48
STATION LONGITUDE	E 343.72
ALTERNATE NAMES	Obs Geofisico de Tenerife Centro Geofisico de Canarias
DATES OF OPERATION	01/1961 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour Magnetometer, Proton magnetometer, fluxmeter. D, H, Z variographs, absolute magnetometers: QHM, BMZ, Declinometer, Terrestrial inductor. D, H, Z variographs speeds 15, 180 mm/h, pulsation recorder. Absolute measurements of D, H, Z, I, F weekly.
RAW DATA	Film, photographic paper, tables
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS

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tic Standard and Rapid Run Measurements (Cont.)

:M: 756
:E:00/00/75

n Measurements

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:M: 599
:E:10/06/75

n Measurements

netometer, flux-
olute magneto-
Terrestrial in-
eds 15, 180 mm/h,
asurements of D,

: paper, tables

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TERRE ADELIE
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DISCIPLINE	D01 Geomag Standard and Rapid
STATION LATITUDE	S 66.67
STATION LONGITUDE	E 140.00
ALTERNATE NAMES	Dumont dUrville
DATES OF OPERATION	05/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour and Fluxgate magnetome ton magnetometer (F), Magnetic absolute measurements; The sys three axis Fluxgate magnetomet ton magnetometer is associated done continuously on two strip (5 gamma/mm), 20 mm/h; 2 gamma on digital magnetic tape at a one reading (H D Z F) every mi
RAW DATA	Photographic pa digital magneti
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTH
FORM OF REDUCED DATA	Tables, magneti printout, micro
DATA ROUTINELY PUBLISHED	Fascicule de li Physique du Glo (yearly issue)
DATA SENT TO WDC-A	No
DATA SENT TO WDC-B	No
DATA SENT TO WDC-C	Yes Meteorological
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. R. Schlich Inst. Physique 4 avenue de Ne Saint Maur Des France
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The reduced data are tables of h magnetic tape of minute values, microfilm (La Cour magnetograms).

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urements (Cont.)

******** ITEM: 603
DATE:05/03/75
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------ D01 Geomag Standard and Rapid Run Measurements
------ S 66.67
------ E 140.00
------ Dumont dUrville
------ 05/1957 to present
------ Regular
----- La Cour and Fluxgate magnetometer (H,D,Z) + Proton magnetometer (F), Magnetic variations and absolute measurements; The system includes a three axis Fluxgate magnetometer to which a proton magnetometer is associated. The recording is done continuously on two strip chart recorders (5 gamma/mm), 20 mm/h; 2 gamma/mm, 51 mm/h) and on digital magnetic tape at a scanning rate of one reading (H D Z F) every minute.
---------- Photographic paper, strip chart, digital magnetic tape
CE ---------- Regular
AVAILABLE AFTER ------ 12 MONTHS
---------- Tables, magnetic tape, computer printout, microfilm
IED ---------- Fascicule de lInstitut de Physique du Globe de Paris (yearly issue)
---------- No
---------- No
---------- Yes
Meteorological Inst., DK 2100 Copenhagen
JEST ---------- Yes
ON ABOUT STATION ----- Dr. R. Schlich
Inst. Physique du Globe de Paris, SOMA
4 avenue de Neptune
Saint Maur Des Fosses
France 94100

ON ABOUT DATA -------- Same as above
---- The reduced data are tables of hourly mean values, magnetic tape of minute values, computer printout, microfilm (La Cour magnetograms).

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TENERIFE
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ITEM: 599
DATE: 10/06/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 28.48
STATION LONGITUDE ---------- E 343.72
ALTERNATE NAMES ---------- Obs Geofisico de Tenerife
Centro Geofisico de Canarias
DATES OF OPERATION ---------- 01/1961 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- La Cour Magnetometer, Proton magnetometer, fluxmeter. D, H, Z variographs, absolute magnetometers: QHM, BMZ, Declinometer, Terrestrial inductor. D, H, Z variographs speeds 15, 180 mm/h, pulsation recorder. Absolute measurements of D, H, Z, I, F weekly.

RAW DATA ---------- Film, photographic paper, tables
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, microfilm
DATA ROUTINELY PUBLISHED ---------- ANUARIOS DEL SERVICIO DE GEOMAGNETISMO Y AERONOMIA, Instituto Geografico y Catastral-Madrid, Available on exchange, tables of hourly and mean values, K indices, magnetic phenomena.

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Charlottenlund

DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- A. Garcia Cogollor
Observatorio Geofisico de Tenerife
Jose Murphy, 6
Tenerife Canary Islands
Spain

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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343

D01 Geomagnetic Standard

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THOMPSON
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ITEM: 606
DATE:09/02/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 55.72
STATION LONGITUDE ----------	E 262.12
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1969 to present Station moved Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	EDA Fluxgate magnetometer (variometer) with chart (scratch type) recorder. The magnetic variations are recorded on a strip chart but no absolute measurements are made. The speed is 72mm/h and the scale valve is 4.76nT/mm (except during 1973-1975 when it was 3.33nT/mm when the microfilm is blown up 12 times.
RAW DATA ----------	35mm YEW Scratch film
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	The records are checked and edited and copies made for WDC-A.
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	No
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. J. K. Walker Earth Physics Branch, EMR 1 Observatory Cresent Ottawa Ontario Canada KIA OY3
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	The station is part of a meridian chain of stations through Ft. Churchill. The old location was N55.75 E262.17.

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THULE/CAMP TUTO
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ITEM: 608
DATE:14/01/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 76.55
STATION LONGITUDE ----------	E 291.17
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1966 to present

rd and Rapid Run Measurements (Cont.)

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TIHANY
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ITEM: 1059
DATE:28/03/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE ----------	N 46.90
STATION LONGITUDE ----------	E 17.89
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	09/1954 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour magnetometers, MTV-2 magnetometer wit electrical output, Proton magnetometer, conti uous recordings on photographic paper, chart speed 20mm/h, perforated paper tape 1 sample/ min
RAW DATA ----------	Photographic paper, perforated paper tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	6-12 MONTHS
FORM OF REDUCED DATA ----------	Tables, graphical plots, compu printout
DATA ROUTINELY PUBLISHED ----------	Publication of the Hungarian G physical Institute Roland Eotv ANNUAL REPORT TIHANY GEOPHYSI OBSERVATORY
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Mr. Laszlo Hegymegi Hungarian Geophysical Institut Columbus u. 17-23 Budapest Hungary H-1145
ADDRESS FOR INFORMATION ABOUT DATA --------	Dr. Peter Toth Hungarian Geophysical Institut Kossuth L. u. 31. Tihany Hungary H - 8237
ADDITIONAL COMMENTS -----	

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TIXIE BAY
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ITEM: 871
DATE:00/00/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE ----------	N 71.60
STATION LONGITUDE ----------	E 128.90
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1944 to present

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THULE/CAMP TUTO

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ITEM: 608
DATE:14/01/76

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 76.55
STATION LONGITUDE ---------- E 291.17
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1966 to present
Station moved
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- Magnetic Field Measurements
RAW DATA ---------- Photorecorded graphics
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Danish Meteorological Institute
Geof. avd. 2, Lyngbyvej 100
Copenhagen
Denmark 2100

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Station moved from Thule AFB to Thule GEOPOLE Station in summer of 1972. Old coordinates N76.50 E291.25. Station moved again in 1976.

Tihany
Hungary H - 8237

ADDITIONAL COMMENTS -----

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TIXIE BAY
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ITEM: 871
DATE: 00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 71.60
STATION LONGITUDE ---------- E 128.90
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1944 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Standard and scalar field magnetometers
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- 16 mm microfilm of graphics
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. V. M. Mishin
SibIZMIR
P.O.B. 4
Irkutsk
USSR 33

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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D01 Geomagnetic Standar

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TOLEDO
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ITEM: 614
DATE:06/06/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 39.88
STATION LONGITUDE ----------	E 355.95
ALTERNATE NAMES ----------	Observatorio Centro Geofisico Obs Geofisico A. Rey Pastor
DATES OF OPERATION ----------	01/1947 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	La Cour magnetometer, proton magnetometer, fluxmeter, D, H, Z, F variographs, absolute magnetometers: QHM, BMZ, declinometer terrestrial inductor. 4 D,H,Z variographs - speeds 15-20-30-180 mm/h, micropulsation recorder 12 mm/m, F proton magnetometer recorder, absolute measurements of D, H, Z, F weekly.
RAW DATA ----------	Film, photographic paper, tables
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER -------	2 MONTHS
FORM OF REDUCED DATA ----------	Tables, microfilm
DATA ROUTINELY PUBLISHED ----------	ANUARIOS DEL SERVICIO DE GEOMAGNETISMO Y AERONOMIA, Instituto Geografico Y Catastral-Madrid-available on exchange. Tables of hourly and mean values-K indices-magnetic phenomena
DATA SENT TO WDC-A ----------	No
DATA SENT TO WDC-B ----------	No
DATA SENT TO WDC-C ----------	Yes Charlottenlund
DATA AVAILABLE ON REQUEST ----------	No
ADDRESS FOR INFORMATION ABOUT STATION ------	Luis de Miguel Instituto Geografico Y Catastral Gral Ibanez de Ibero, 3 Madrid Spain 3
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

ndard and Rapid Run Measurements (Cont.)

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ITEM: 615
DATE:21/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE	S 37.53
STATION LONGITUDE	E 145.47
ALTERNATE NAMES	
DATES OF OPERATION	01/1919 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour magnetograph, three components H,D,Z, continuous recording 20 mm/h weekly control observations.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Mean hourly values on magnetic tape, computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	No
DATA SENT TO WDC-C	No
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Geophysical Observatory Group Bureau of Mineral Resources P.O. Box 378 Canberra City Australia 2601
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ITEM: 754
DATE:00/00/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurement
STATION LATITUDE	S 43.25
STATION LONGITUDE	E 294.68
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Normal speed (20 mm/h) standard magnetographs
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Microfilm
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	

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TRELEW

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ITEM: 754
DATE:00/00/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	S 43.25
STATION LONGITUDE ----------	E 294.68
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Normal speed (20 mm/h) standard magnetographs
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Microfilm
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. Otto Schneider Observatorio Astronomico Paseo del Bosque La Plata Argentina
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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D01 Geomagnetic Standard a

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ITEM: 637
DATE:02/06/75

DISCIPLINE	DØ1 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 8.48
STATION LONGITUDE	E 76.95
ALTERNATE NAMES	
DATES OF OPERATION	1Ø/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	D,H,Z Askania variometers (Eschenhagen), continuous, along with baselines whose values are determined separately; H and Z variometers compensated for temperature variations; all 3 elements recorded on single photographic paper, chart speed 20mm/h, time marks; quich-run gears for speeds of 40mm/h and 120mm/h also provided for the recorder.
RAW DATA	Photographic paper, microfilm copies
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Monthly tables in computer printouts
DATA ROUTINELY PUBLISHED	Indian Magnetic Data published annually by the Director, Indian Institute of Geomagnetism, Colaba, Bombay 400 005, India. Monthly tables of mean hourly values of D, H, and Z; magnetic storm statistics
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. B. N. Bhargava, Director Indian Institute of Geomagnetism Dr. Nanabhai Moos Marg Colaba, Bombay Maharashtra India 400 005
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Baselines for H, Z done daily with QHM, BMZ respectively; absolute D with QHM once a week on Wednesday about local noon. Observed absolute values periodically standardized by intercomparison with those observed at Alibag, using a set of QHM and BMZ as touring standards. Set of IZMIRAN (Bobrov) variometers for D,H,Z also installed; daily records of D,H,Z on a single chart at a paper speed of 20mm/h since 1Ø/1974.

d and Rapid Run Measurements (Cont.)

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ITEM: 638
DATE:26/01/76

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 69.66
STATION LONGITUDE	E 18.94
ALTERNATE NAMES	
DATES OF OPERATION	1930 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour & Askania-Bamberg Magnetometers normal set 20 mm/h, storm set 15 mm/h, Grenet pulsatic 6 mm/min.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Computer printouts
DATA ROUTINELY PUBLISHED	Magnetic observations (year boo Print of records (monthly repor
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Copenhaen
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Mr. Ove Bratteng University of Tromso P.O. Box 953 Tromso Norway N-9001
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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TSUMEB
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ITEM: 639
DATE:18/04/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 19.20
STATION LONGITUDE	E 17.58
ALTERNATE NAMES	
DATES OF OPERATION	08/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour magnetometer, geomagnetic variations, Modified La Cour normal run magnetograph, recording speed 20 mm/h. Continuous recording of D, H, Z with full baseline control. Scale values: D, 0.41 min/mm; H, 4.0 nT/mm; Z, 3.6 nT/mm.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables, magnetic tape (hourly values)
DATA ROUTINELY PUBLISHED	MAGNETIC OBSERVATIONS AT TSUME

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TSUMEB

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ITEM: 639
DATE:18/04/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	S 19.20
STATION LONGITUDE	E 17.58
ALTERNATE NAMES	
DATES OF OPERATION	08/1964 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour magnetometer, geomagnetic variations, Modified La Cour normal run magnetograph, recording speed 20 mm/h. Continuous recording of D, H, Z with full baseline control. Scale values: D, 0.41 min/mm; H, 4.0 nT/mm; Z, 3.6 nT/mm.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables, magnetic tape (hourly values)
DATA ROUTINELY PUBLISHED	MAGNETIC OBSERVATIONS AT TSUMEB disbributed on exchange basis
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
	Kyoto, Hailsham, Charlottenlund
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Magnetic Observatory (CSIR) P.O. Box 32 Hermanus Rep of So Africa 7200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of organized South African network: Hermanus-Tsumeb-Hartebeesthoek-Grahamstown; auxiliary equipment: PPM for F, QHM for H, Field declinometer for D.

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D01 Geomagnetic Standard ar

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TUCSON
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ITEM: 640
DATE:14/04/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 32.25
STATION LONGITUDE ---------- E 249.17
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1957 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ------ Rapid Run Magnetograph (Ruska), continuous recording, records changed daily. Photo paper recording 4 mm per minute, suspension variometers for D & H, modified La Cour for Z. Each component is recorded on separate 30 cm x 50 cm record. (Ruska housing modified uses La Cour magnet.)

RAW DATA ---------- Photo paper recordings
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 2 MONTHS
FORM OF REDUCED DATA ---------- Photo copy, microfilm copy
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ John D. Wood
USGS Theoretical & Applied Geophysics
Denver Federal Center, Bldg. 25
Denver CO
USA 80225

ADDRESS FOR INFORMATION ABOUT DATA --------- William Paulishak
WDC-A For Solar-Terrestrial Physics
NOAA-EDS
Boulder CO
USA 80302

ADDITIONAL COMMENTS ------ Magnetograph will be replaced by proton-fluxgate system recording variations in D, H, Z & F digitally on magnetic tape sometime in 1975-76. Special purpose data available after 1 month. Rapid run data is not normally reduced.

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Standard and Rapid Run Measurements (Cont.)

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ITEM
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DISCIPLINE ----------	D01 Geomag Standard and Rapid Run
STATION LATITUDE ----------	N 32.25
STATION LONGITUDE ----------	E 249.17
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1910 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Normal Ruska Magnetograph, continu records changed daily. Ruska H & variometers and modified La Cour Z Absolutes weekly or semi-weekly wi Vector Magnetometer and Ruska susp netometer for D. Recording on pho mm per hour on 19 cm x 53 cm recor housing modified to use La Cour ma
RAW DATA ----------	Photo paper, mm sca lar form
DATA REDUCTION PRACTICE ----------	Regular , Speci
REGULAR REDUCED DATA AVAILABLE AFTER -------	2 MONTHS
FORM OF REDUCED DATA ----------	Magnetic tape, comp photos, microfilm c
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	John D. Wood USGS Theoretical & Denver Federal Cent Denver CO USA
ADDRESS FOR INFORMATION ABOUT DATA ---------	William Paulishak WDC-A For Solar Ter NOAA-EDS Boulder CO USA

ADDITIONAL COMMENTS ------ Station started 1909, variations buil in 1941. Proto Vector measurements b 30 meters from old absolutes pier. M to be replaced by proton-fluxgate rec iations in D, H, Z & F sometime in 19 purpose data available after 1 month. ues on magnetic tape and computer pri digitized values on magnetic tape (fo vals), photo and microfilm copies of

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surements (Cont.)

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ITEM: 641
DATE:14/04/75

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--------	D01 Geomag Standard and Rapid Run Measurements
--------	N 32.25
--------	E 249.17

--------	01/1910 to present
--------	Regular
N ------	Normal Ruska Magnetograph, continuous recording, records changed daily. Ruska H & D suspension variometers and modified La Cour Z variometer. Absolutes weekly or semi-weekly with Proton Vector Magnetometer and Ruska suspension magnetometer for D. Recording on photo paper 20 mm per hour on 19 cm x 53 cm record. (Ruska housing modified to use La Cour magnet).
----------	Photo paper, mm scalings in tabular form
CE ----------	Regular , Special
AVAILABLE AFTER -------	2 MONTHS
----------	Magnetic tape, computer printouts, photos, microfilm copies
HED ----------	
----------	Yes

UEST ----------	Yes
ON ABOUT STATION ------	John D. Wood USGS Theoretical & Applied Geophysics Denver Federal Center, Bldg. 25 Denver CO USA 80225
ON ABOUT DATA ---------	William Paulishak WDC-A For Solar Terrestrial Physics NOAA-EDS Boulder CO USA 80302

----- Station started 1909, variations building moved in 1941. Proto Vector measurements began in 1962 30 meters from old absolutes pier. Magnetograph to be replaced by proton-fluxgate recording variations in D, H, Z & F sometime in 1975-76. Special purpose data available after 1 month. Hourly values on magnetic tape and computer printouts, 2.5 min digitized values on magnetic tape (for some intervals), photo and microfilm copies of recordings.

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D01 Geomagnetic Standard ar

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ITEM: 648
DATE:05/06/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 23.02
STATION LONGITUDE	E 75.78
ALTERNATE NAMES	
DATES OF OPERATION	04/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	A set of IZMIRAN (Bobrov) quartz variometers for D, H and Z, variations of the three geomagnetic elements, D, H and Z are continuously recorded, along with baselines whose values are determined separately. All the three elements, D, H, and Z are recorded on a single photographic paper at a chart speed of 20 mm/h.
RAW DATA	Photographic paper, microfilm copies
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Computer printouts
DATA ROUTINELY PUBLISHED	INDIAN MAGNETIC DATA published annually by the Director, Indian Institute of Gemagnetism, Colaba, Bombay 400 005, India. Data are monthly tables of mean hourly values, magnetic storm statistics
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. B. N. Bhargava, Director Indian Institute of Geomagnetism Dr. Nanabhai Moos Marg Colaba, Bombay Maharashtra India 400 005
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Observatory started on temporary basis, part of Indian participation in the Geomagnetic Meridian Project (GMP). Baseline determinations for H and Z are done by daily observations of absolute H and Z with QHM and BMZ respectively and for D, by observations of absolute D with QHM once a week on Wednesday at about local noon. Observed absolute values periodically standardized by intercomparison with those observed at Alibag, using a set of QHM and BMZ as touring standards.

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ic Standard and Rapid Run Measurements (Cont.)

M: 648
E:05/06/75

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solute H and Z
r D, by observa-
week on Wednes-
bsolute values
mparison with
t of QHM and BMZ

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UPPSALA
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DISCIPLINE ----------	D01 Geomag Standard and Rapid Ru	
STATION LATITUDE ----------	N	59.80
STATION LONGITUDE ----------	E	17.60
ALTERNATE NAMES ----------		
DATES OF OPERATION ----------	05/1957 to present	
OBSERVING SCHEDULE ----------	Regular	
INSTRUMENT DESCRIPTION -----	H-Magnetometer, variations in ge intensity (N-S component); Torsi having a photoelectric converter displacement of the sensing elem current by use of 2 photoelement connection; sensitivity about + analog output on strip chart rec + or - 8 gamma/mm.	
RAW DATA ----------	Strip chart	
DATA REDUCTION PRACTICE ----------	None	
REGULAR REDUCED DATA AVAILABLE AFTER ------		MONTHS
FORM OF REDUCED DATA ----------		
DATA ROUTINELY PUBLISHED ----------		
DATA SENT TO WDC-A ----------		
DATA SENT TO WDC-B ----------		
DATA SENT TO WDC-C ----------		
DATA AVAILABLE ON REQUEST ----------	Yes	
ADDRESS FOR INFORMATION ABOUT STATION -----	Mr. Harald Derblo Uppsala Ionospher Uppsala Sweden	
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above	
ADDITIONAL COMMENTS -----		

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USSURISK
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DISCIPLINE ----------	D01 Geomag Standard and Rapid Ru	
STATION LATITUDE ----------	N 43.68	
STATION LONGITUDE ----------	E 132.17	
ALTERNATE NAMES ----------		
DATES OF OPERATION ----------	01/1936 to present	
OBSERVING SCHEDULE ----------	Regular	
INSTRUMENT DESCRIPTION ------	Standard and scalar field magnet	
RAW DATA ----------		
DATA REDUCTION PRACTICE ----------		
REGULAR REDUCED DATA AVAILABLE AFTER -------		MONTHS
FORM OF REDUCED DATA ----------	16 mm microfilm	

ements (Cont.)

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ITEM: 1091
DATE:08/07/75

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----- D01 Geomag Standard and Rapid Run Measurements
----- N 59.80
----- E 17.60

----- 05/1957 to present
----- Regular
----- H-Magnetometer, variations in geomagnetic H-intensity (N-S component): Torsion H-magnetometer having a photoelectric converter from angular displacement of the sensing element to electric current by use of 2 photoelements in differential connection; sensitivity about + or - 2 gamma; analog output on strip chart recorder 20 mm/h and + or - 8 gamma/mm.
---------- Strip chart
---------- None
AILABLE AFTER ------ MONTHS

D ----------

ST ---------- Yes
ABOUT STATION ----- Mr. Harald Derblom
Uppsala Ionospheric Observatory
Uppsala
Sweden S-755 90

ABOUT DATA -------- Same as above
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ITEM: 869
DATE:00/00/75

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------ D01 Geomag Standard and Rapid Run Measurements
------ N 43.68
------ E 132.17

------ 01/1936 to present
------ Regular
------ Standard and scalar field magnetometers

ILABLE AFTER ------ MONTHS

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USSURISK

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ITEM: 869
DATE:00/00/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 43.68
STATION LONGITUDE ----------	E 132.17
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1936 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Standard and scalar field magnetometers
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	16 mm microfilm of graphics
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. V. M. Mishin SibIZMIR P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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1 348

D01 Geomagnetic Standard

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VALENTIA
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ITEM: 654
DATE:14/04/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 51.93
STATION LONGITUDE ----------	E 349.75
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1956 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	La Cour quick-run magnetometer, continuous recording, standard La Cour variometers with La Cour recorder, chart speed 180 mm/h recording H, D & Z continuously.
RAW DATA ----------	Photographic paper
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER -------	1 MONTHS
FORM OF REDUCED DATA ----------	Pulsation and disturbance data as requested by IAGA.
DATA ROUTINELY PUBLISHED ----------	Annual MAGNETIC OBSERVATIONS AT VALENTIA OBSERVATORY 19-- available from Meteorological Service, 44 Upper OConnell St., Dublin, Ireland, Tables of Pc, Pi, SSC, bays etc.
DATA SENT TO WDC-A ----------	Unknown
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Copenhagen, Denmark
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	Valentia Obervatory Cahirciveen Co. Kerry Ireland
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	Data supplied monthly to IAGA Committee for Rapid Variations.

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ic Standard and Rapid Run Measurements (Cont.)

654
14/04/75

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recording H,

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VICTORIA
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DISCIPLINE	D01 Geomag Standard and Rapid Ru
STATION LATITUDE	N 48.52
STATION LONGITUDE	E 236.58
ALTERNATE NAMES	
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	AMOS (Automatic Magnetic Observa (north), Y(east), Z(vertical), F of field recorded once per minut netic tape, with an analogue out chart at 20 mm/h. Absolute obse (declination) and I (inclination intensity F are made once or twi
RAW DATA	Digital magnetic
DATA REDUCTION PRACTICE	Regular , Spe
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Digital magnetic microfilm
DATA ROUTINELY PUBLISHED	Annual report ava Earth Physics Bra instrument parame hourly value summa
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Victoria Magnetic R.R. #7, 5071 W. Victoria Br Canada
ADDRESS FOR INFORMATION ABOUT DATA	Division of Geoma Dept. Energy, Min 1 Observatory Cre Ottawa On Canada
ADDITIONAL COMMENTS	Standard run 3 component Ruska magn able fluxgate magnetometer for abso vations, proton recession magnetome vation, digital recording commenced

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ements (Cont.)

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ITEM: 660
DATE:02/06/75

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--- D01 Geomag Standard and Rapid Run Measurements
--- N 48.52
--- E 236.58

--- 07/1957 to present

--- AMOS (Automatic Magnetic Observatory System), X (north), Y(east), Z(vertical), F(total intensity) of field recorded once per minute on digital magnetic tape, with an analogue output on strip chart at 20 mm/h. Absolute observation of D (declination) and I (inclination) and of total intensity F are made once or twice a week.

---------- Digital magnetic tape, strip chart
---------- Regular , Special
LABLE AFTER ------- 18 MONTHS
---------- Digital magnetic tape, tables, microfilm
---------- Annual report available from Earth Physics Branch contains instrument parameters, mean hourly value summary.
---------- Yes

---------- Yes
BOUT STATION ------ Victoria Magnetic Observatory
R.R. #7, 5071 W. Saanich Road
Victoria British Columbia
Canada V8X 3X3

BOUT DATA --------- Division of Geomagnetism, Earth Physics
Dept. Energy, Mines & Resources
1 Observatory Cresent
Ottawa Ontario
Canada KIA OY3

Standard run 3 component Ruska magnetograph, portable fluxgate magnetometer for absolute D.I. observations, proton recession magnetometer for F observation, digital recording commenced 11/1970.

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349

D01 Geomagnetic Standard

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WALLOPS ISLAND
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ITEM: 1071
DATE:20/02/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 37.94
STATION LONGITUDE ----------	E 284.53
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1963 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Fluxgate magnetometer recording continuously on strip chart at one h/3 inch (76.5 mm) of chart; set on GMT (UTC) time.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Tables, graphical plots
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Robert S. Gray, Sr. NOAA Ionosphere Sounding Obs, Bldg B NASA Wallops Station Wallops Island VA USA 23337
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available after 1 day. Real time information available on request.

349

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WARNKENHAGEN
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ITEM: 1154
DATE:18/03/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 54.00
STATION LONGITUDE ----------	E 11.07
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Earth Currents, Standard Magnetometer, Induction Magnetometer, Proton F-Magnetometer; Magn. Norm. -Reg. 1 System, 1 storm-system: Normal-Reg. 20mm/h, about 2.2nT/mm or 0.43/mm and about 5nT/mm; Earth Currents (geogr. E-W and N-S) 150m and 100m, about 0.5mV/km/mm, X, Y, Z, about 0.02

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etic Standard and Rapid Run Measurements (Cont.)

ITEM: 1071
DATE:20/02/75

Run Measurements

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6.5 mm) of chart;

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Sounding Obs, Bldg E-144
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WESTON
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DISCIPLINE ----------	D01 Geomag Standard and Rapid
STATION LATITUDE ----------	N 42.43
STATION LONGITUDE ----------	E 288.68
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1958 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Ruska three component variome Cesium total field magnetomet Cesium on continuous strip ch form at 10 mm intervals. Var photographic records
RAW DATA ----------	Photoraphic pa digital printo
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONT
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	AFCRL GEOPHYSI BULLETIN - sta bulletin
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Weston Observa Boston College 319 Concord Ro Weston USA
ADDRESS FOR INFORMATION ABOUT DATA --------	
ADDITIONAL COMMENTS -----	Short periods of interruption i

ITEM: 1154
DATE:18/03/76

Run Measurements

tometer, Induction
meter; Magn. Norm.
; Normal-Reg.
/mm and about
E-W and N-S) 150m
, Y, Z, about 0.02
C paper 6mm/min;

ements (Cont.)

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ITEM: 667
DATE:03/03/75

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---- D01 Geomag Standard and Rapid Run Measurements
---- N 42.43
---- E 288.68

---- 07/1958 to present
Intermittent operation
---- Regular
---- Ruska three component variometer, Varian Cesium total field magnetometer. Output of Cesium on continuous strip chart and in digital form at 10 mm intervals. Variometers - standard photographic records
---------- Photoraphic paper, strip chart, digital printout for TF
---------- Regular
ILABLE AFTER ------ 3 MONTHS

---------- AFCRL GEOPHYSICS AND SPACE DATA BULLETIN - standard hourly value bulletin
----

T ---------- Yes
ABOUT STATION ----- Weston Observatory
Boston College-Weston Observatory
319 Concord Road
Weston MA
USA 02193

ABOUT DATA --------
- Short periods of interruption in 1959 and 1963.

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WARNKENHAGEN

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ITEM: 1154
DATE:18/03/76

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 54.00
STATION LONGITUDE ----------	E 11.07
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Earth Currents, Standard Magnetometer, Induction Magnetometer, Proton F-Magnetometer; Magn. Norm. -Reg. 1 System, 1 storm-system: Normal-Reg. 20mm/h, about 2.2nT/mm or 0.43/mm and about 5nT/mm; Earth Currents (geogr. E-W and N-S) 150m and 100m, about 0.5mV/km/mm, X, Y, Z, about 0.02 and Z 0.001nT/s/mm, photographic paper 6mm/min: Proton Magnetometer for F digital (1 date/60s).
RAW DATA ----------	Photographic paper, strip chart for Proton Magnetometer F
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Photographic paper, paper tape
DATA ROUTINELY PUBLISHED ----------	Review and special dates in the YEARBOOK OF THE ADOLF-SCHMIDT-OBSERVATORY in Niemegk
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Klaus Lengning Adolf-Schmidt-Obs fur Erdmag in Niemeg Lindenstr. 7 Niemegk Kreis Belzig German Dem Rep 1824 DDR
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available after 6 months.

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D01 Geomagnetic Standard

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WINGST
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ITEM: 668
DATE:29/04/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 53.74
STATION LONGITUDE ---------- E 9.07
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 03/1938 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Magnetometer Schulze (D,H), La Cour (Z), recorder Schulze. Recordings of time variations of components declination (D), horizontal (H) and vertical (Z) intensities. Photographic recorder, classical type, chart speed 20 mm/s, scale values about 4, 5 nT/mm (D,H), 3 nT/mm (Z), change of record daily.

RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 6 MONTHS
FORM OF REDUCED DATA ---------- Microfilm, tables of hourly values, photographic prints
DATA ROUTINELY PUBLISHED ---------- ERDMAGNETISCHES JAHRBUCH, MAGNETOGRAMME WINGST, monthly report (K indices and special events from magnetograms) published by Deutsches Hydrographisches Institut, Hamburg
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Deutsches Hydrographisches Institut
Bernhard-Nocht-Str. 78
Hamburg 4
Fed Rep of Germany D 2000

ADDRESS FOR INFORMATION ABOUT DATA -------- Erdmagnetisches Observatorium Wingst
Am Olymp 13
Wingst
Fed Rep of Germany D 2177

ADDITIONAL COMMENTS ----- Auxiliary equipment: second system, storm system, Askania-Variograph, direct recorder for D and H. Participation in organized network: comparison of momentary values between European Observatories; Wingst is one of 13 Kp observatories. Former station location Wilhelmshaven 1874-1911 and 1932-1934. Photographic prints for single magnetograms available on request. Special purpose data available after 1 month.

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tic Standard and Rapid Run Measurements (Cont.)

EM: 668
TE:29/04/75

n Measurements

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iations of com-
tal (H) and ver-
phic recorder,
m/s, scale values
(Z), change of

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GST, monthly
and special
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es Hydrogra-
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storm system,
for D and H.
comparison of
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11 and 1932-1934.
etograms avail-
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WINGST
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DISCIPLINE	D01 Geomag Standard and Rapid
STATION LATITUDE	N 53.74
STATION LONGITUDE	E 9.07
ALTERNATE NAMES	
DATES OF OPERATION	11/1950 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction coil magnetometer, i mu-metal core, Mollgalvanomete Zernike-galvanometer for dz/dt recorder, chart speed: 360 mm scale values (long period) in (dx/dt), 0.07 (dy/dt), (0.007 record daily.
RAW DATA	Photographic pa
DATA REDUCTION PRACTICE	Regular , S
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTH
FORM OF REDUCED DATA	Microfilm, phot for single reco
DATA ROUTINELY PUBLISHED	Monthly Report: etc.) editor: D Hydroraphisches
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Deutsches Hydro Bernhard-Nocht- Hamburg 4 Fed Rep of Germ
ADDRESS FOR INFORMATION ABOUT DATA	Erdmagnetisches Am Olymp 13 Wingst Fed Rep of Germ
ADDITIONAL COMMENTS	Pulsation system, Grenet-type var for Institut fur Geophysik, Gotti Z: 21/06/1973-06/06/1974, 09/07/1 19/02/1975-present. Special purp after 1 month.

ements (Cont.)

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ITEM: 669
DATE:29/04/75

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--- D01 Geomag Standard and Rapid Run Measurements
--- N 53.74
--- E 9.07

--- 11/1950 to present
--- Regular
--- Induction coil magnetometer, induction coils with mu-metal core, Mollgalvanometers for dx/dt,dy/dt, Zernike-galvanometer for dz/dt photographic recorder, chart speed: 360 mm/h, asymptotic scale values (long period) in nT/s/mm: 0.08 (dx/dt), 0.07 (dy/dt), (0.007 dz/dt), change of record daily.
---------- Photographic paper
---------- Regular , Special
LABLE AFTER ------ 6 MONTHS
---------- Microfilm, photographic prints for single records
---------- Monthly Report: events (pc, pi, etc.) editor: Deutsches Hydroraphisches Institut
---------- Yes

? ---------- Yes
BOUT STATION ----- Deutsches Hydrographisches Institut
Bernhard-Nocht-Str. 78
Hamburg 4
Fed Rep of Germany D 2000

BOUT DATA -------- Erdmagnetisches Observatorium Wingst
Am Olymp 13
Wingst
Fed Rep of Germany D 2177

Pulsation system, Grenet-type variometer, operated for Institut fur Geophysik, Gottingen; intermittent Z: 21/06/1973-06/06/1974, 09/07/1974-31/12/1974, 19/02/1975-present. Special purpose data available after 1 month.

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351

D01 Geomagnetic Standard a

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WITTEVEEN
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ITEM: 673
DATE:15/05/75

DISCIPLINE	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE	N 52.81
STATION LONGITUDE	E 6.67
ALTERNATE NAMES	
DATES OF OPERATION	09/1939 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	La Cour, rapid run, magnetic elements D, H, continuous recording by La Cour, rapid run recorder, chart speeds 3 mm/h or 6 mm/h (after 1957), scale values until 1957 5 nT/mm, thereafter D 2nT/mm, H 1 nT/mm.
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Director Division of Geophysics Royal Netherlands Meteorological Inst. Utrechtseweg 297 De Bilt Netherlands
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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netic Standard and Rapid Run Measurements (Cont.)

ITEM: 673
DATE:15/05/75

Run Measurements

elements D, H,
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or 6 mm/h (after
7 5 nT/mm, there-

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nds Meteorological Inst.
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WINNIPEG
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DISCIPLINE ----------	D01 Geomag Standard and Rapi
STATION LATITUDE ----------	N 49.63
STATION LONGITUDE ----------	E 262.87
ALTERNATE NAMES ----------	Glenlea
DATES OF OPERATION ----------	10/1969 to present Station moved
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	EDA fluxgate magnetic variom (scratch type) recorder. Th ment records the variations field on a chart recorder. ments are made. The speed i value is 4.76 nT/mm when the increased by the normal fact
RAW DATA ----------	35 mm YEW scr
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MON
FORM OF REDUCED DATA ----------	Records are c after a few m
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. J. K. Wal Earth Physics 1 Observatory Ottawa Canada
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	The station was closed on 10/19 the magnetic observatory at Whi is part of a meridian chain of Ft. Churchill, Canada.

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above

surements (Cont.)

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ITEM: 672
DATE:09/02/76

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--------- D01 Geomag Standard and Rapid Run Measurements
--------- N 49.63
--------- E 262.87
--------- Glenlea
--------- 10/1969 to present
Station moved
--------- Regular
ION ----- EDA fluxgate magnetic variometer with chart (scratch type) recorder. The magnetic instrument records the variations of the magnetic field on a chart recorder. No absolute measurements are made. The speed is 72 mm/h and scale value is 4.76 nT/mm when the microfilm is increased by the normal factor of 12.

---------- 35 mm YEW scratch film
TICE ---------- None
A AVAILABLE AFTER ------ MONTHS
A ---------- Records are checked and edited after a few months

ISHED ----------
---------- Yes

EQUEST ----------
TION ABOUT STATION ----- Dr. J. K. Walker
Earth Physics Branch EMR
1 Observatory Cresent
Ottawa Ontario
Canada KIA OY3

TION ABOUT DATA -------- Same as above
----- The station was closed on 10/1975 and replaced by the magnetic observatory at White Shell. The station is part of a meridian chain of stations through Ft. Churchill, Canada.

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D01 Geomagnetic Standard a

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WITTEVEEN
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ITEM: 674
DATE:15/05/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 52.81
STATION LONGITUDE ---------- E 6.67
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1938 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- La Cour magnetometers, normal speed recording, magnetic elements H, Z, D, continuous recording of magnetic declination, horizontal and vertical component, chart speed 15 mm/h, scale values roughly 5 nT/mm.
RAW DATA ---------- Photographic paper, digital magnetic tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 6 MONTHS
FORM OF REDUCED DATA ---------- Tables, magnetic tape, microfilm
DATA ROUTINELY PUBLISHED ---------- Yearbook Geomagnetism, 1938-1969, Witteveen hourly mean values, etc. for D, H, Z.
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Director Division of Geophysics
Royal Netherlands Meteorological Inst.
Utrechtseweg 297
De Bilt
Netherlands

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Hourly, daily, monthly and yearly mean values are on digital magnetic tape.

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YAKUTSK
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ITEM: 867
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 62.02
STATION LONGITUDE ---------- E 129.72
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1931 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Standard and scalar field magnetometers

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netic Standard and Rapid Run Measurements (Cont.)

ITEM: 674
DATE:15/05/75

Run Measurements

speed recording,
ntinuous recording
izontal and ver-
15 mm/h, scale

paper, digital mag-

THS
tic tape, microfilm
agnetism, 1938-
en hourly mean val-
D, H, Z.

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ands Meteorological Inst.
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ly mean values are on

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YELLOWKNIFE
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DISCIPLINE ----------	D01 Geomag Standard and Rap
STATION LATITUDE ----------	N 62.48
STATION LONGITUDE ----------	E 245.53
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1974 to present
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION -----	AMOS (Automatic Magnetic Ob digital recording of earths X(north) Y(east) Z(vertical of field recorded once per netic tape with analogue ou 20 mm/h. Absolute observat and I (inclination) and of made once a week.
RAW DATA ----------	Digital mag
DATA REDUCTION PRACTICE ----------	Regular ,
REGULAR REDUCED DATA AVAILABLE AFTER ------	18 MO
FORM OF REDUCED DATA ----------	Digital magn microfilm
DATA ROUTINELY PUBLISHED ----------	Annual repor Physics Bran parameters, summary.
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Div of Geoma Dept. of Ene 1 Observator Ottawa Canada
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as abov
ADDITIONAL COMMENTS -----	3 component recording fluxgate and storm recorder. Pen and mm/h. Portable fluxgate magnet I. observations. Proton prece F observation. Special purpos 2 months.

ITEM: 867
DATE:00/00/75

Run Measurements

gnetometers

urements (Cont.)

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ITEM: 685
DATE:02/06/75

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------- D01 Geomag Standard and Rapid Run Measurements
------- N 62.48
------- E 245.53

------- 10/1974 to present

N ----- AMOS (Automatic Magnetic Observatory System), digital recording of earths magnetic field, X(north) Y(east) Z(vertical) F(total intensity) of field recorded once per minute on digital magnetic tape with analogue output on strip chart at 20 mm/h. Absolute observations of D(declination) and I (inclination) and of total intensity F are made once a week.

---------- Digital magnetic tape, strip chart
CE ---------- Regular , Special
AVAILABLE AFTER ------ 18 MONTHS
---------- Digital magnetic tape, tables, microfilm
HED ---------- Annual report available from Earth Physics Branch contains instrument parameters, mean hourly value summary.
---------- Yes

UEST ---------- Yes
ON ABOUT STATION ----- Div of Geomagnetism, Earth Physics Br.
Dept. of Energy, Mines & Resources
1 Observatory Cres.
Ottawa Ontario
Canada K1A 0Y3

ON ABOUT DATA -------- Same as above
---- 3 component recording fluxgate serves as stand-by and storm recorder. Pen and ink charts are at 20 mm/h. Portable fluxgate magnetometer for absolute D. I. observations. Proton precession magnetometer for F observation. Special purpose data available after 2 months.

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YAKUTSK

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ITEM: 867

DATE:00/00/75

DISCIPLINE ----------	D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ----------	N 62.02
STATION LONGITUDE ----------	E 129.72
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1931 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Standard and scalar field magnetometers
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	16 mm microfilm of graphics
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. V. M. Mishin SibIZMIR P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS -------	

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D01 Geomagnetic Standard a

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YORK
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ITEM: 761
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 53.97
STATION LONGITUDE ---------- E 358.92
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Standard Magnetometer
RAW DATA ---------- Magnetic tape, photorecorded graphics
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Magnetic tape, photorecorded graphics
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Brian Richard Leaton
WDC-Cl, Inst of Geological Sciences
Herstmonceux Castle
Hailsham Sussex
England

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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YUZHNO-SAKHALINSK
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ITEM: 870
DATE:00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 46.93
STATION LONGITUDE ---------- E 142.70
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1942 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Standard and scalar field magnetometers
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- 16 mm microfilm of graphics
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------

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: Standard and Rapid Run Measurements (Cont.)

: 761
:00/00/75

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M: 870
E:00/00/75

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DISCIPLINE ----------	D01 Geomag Standard and Rapid Ru
STATION LATITUDE ----------	N 11.15
STATION LONGITUDE ----------	E 7.65
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	02/1965 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour magnetometer, standard-r H, D & Z, standard La Cour type temperature controlled room and cording. Chart speed is 15 mm p of paper is carried out each mor minutes before 0800 GMT. Absolu H, D, & Z are done weekly.
RAW DATA ----------	Photographic pape
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Head of Departmen Ahmadu Bello Uni Zaria Nigeria
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Plans for digital data on computer data on computer printouts are unde was a break in absolute measuremen 6/1975. The station is very likely a new site (already surveyed) abou the present site.

nents (Cont.)

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ITEM: 688
DATE:10/07/75

D01 Geomag Standard and Rapid Run Measurements
N 11.15
E 7.65

02/1965 to present
Regular
La Cour magnetometer, standard-run measurement of H, D & Z, standard La Cour type variometers in temperature controlled room and photographic recording. Chart speed is 15 mm per hour. Change of paper is carried out each morning about 30 minutes before 0800 GMT. Absolute measurement of H, D, & Z are done weekly.

---------- Photographic paper (magnetograms)
---------- None
BLE AFTER ------ *MONTHS*

---------- Yes
UT STATION ----- Head of Department
Ahmadu Bello University
Zaria
Nigeria

UT DATA -------- Same as above
Plans for digital data on computer cards and reduced data on computer printouts are underway. There was a break in absolute measurements from 9/1972 to 6/1975. The station is very likely to be moved to a new site (already surveyed) about 10 km away from the present site.

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YUZHNO-SAKHALINSK
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ITEM: 870
DATE: 00/00/75

DISCIPLINE ---------- D01 Geomag Standard and Rapid Run Measurements
STATION LATITUDE ---------- N 46.93
STATION LONGITUDE ---------- E 142.70
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1942 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Standard and scalar field magnetometers
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER -------- MONTHS
FORM OF REDUCED DATA ---------- 16 mm microfilm of graphics
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. V. M. Mishin
SibIZMIR
P.O.B. 4
Irkutsk
USSR 33

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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D02 Magnetospheri

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ITEM: 2
DATE:23/02/76

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 9.03
STATION LONGITUDE ---------- E 38.77
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 02/1965 to present
Gap in operation 9/1974-6/1975
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Induction magnetometer, continuous recording of H and D. I)from 2/1965 to 12/1975: a)strip chart 6mm/min (and 30mm/min occasionally), b)analog magnetic tape (FM, 15/500ips) on special periods. II)from 01/1976 on: a)strip chart 6mm/min and by analog magnetic tape (FM, 15/500 ips). Bandwidth: I)3 to 1/200 Hz, II)5 to 1/300 Hz.
RAW DATA ---------- Strip chart, analog magnetic tape
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. J. Roquet
Institut de Physique du Globe
Tour 14, 4 Place Jussieu
Paris Cedex 05
France 75230

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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AUCKLAND
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ITEM: 41
DATE:18/02/76

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- S 36.51
STATION LONGITUDE ---------- E 174.45
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Induction Magnetometer

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Magnetospheric Micropulsation Phenomena

TEM: 2
ATE:23/02/76

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lly), b)analog
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0 ips). Band-
1/300 Hz.
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Jussieu

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BOROK
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DISCIPLINE ---------- D02 Magnetospheric Micropulsati
STATION LATITUDE ---------- N 58.03
STATION LONGITUDE ---------- E 38.97
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Induction Magnetometer
RAW DATA ---------- Magnetic tape,
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTH
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Anatol V. G
Geophys Obs Bor
Yaroslavskaya R
Borok
USSR

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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BOROK
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DISCIPLINE ---------- D02 Magnetospheric Micropulsati
STATION LATITUDE ---------- N 58.03
STATION LONGITUDE ---------- E 38.33
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 08/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Pulsations 0.001-1 Hz
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTH
FORM OF REDUCED DATA ---------- Analog magnetic
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------

TEM: 41
ATE:18/02/76

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ITEM: 773
DATE:00/00/75

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---------- D02 Magnetospheric Micropulsation Phenomena
---------- N 58.03
---------- E 38.97

---------- Regular
TION ------ Induction Magnetometer
---------- Magnetic tape, strip chart
CTICE ----------
TA AVAILABLE AFTER ------- MONTHS
TA ---------- Tabular matter
LISHED ----------

REQUEST ----------
ATION ABOUT STATION ------ Dr. Anatol V. Gul-elmi
Geophys Obs Borok, Inst Phys of Earth
Yaroslavskaya Region
Borok Nekouzskiy District
USSR 152742

TION ABOUT DATA ---------- Same as above

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ITEM: 837
DATE:00/00/75

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---------- D02 Magnetospheric Micropulsation Phenomena
---------- N 58.03
---------- E 38.33

---------- 08/1957 to present
---------- Regular
ION ------ Pulsations 0.001-1 Hz

TICE ----------
A AVAILABLE AFTER ------- MONTHS
A ---------- Analog magnetic tape, strip chart
ISHED ----------

EQUEST ----------
TION ABOUT STATION ------ Prof. V. A. Troitskaya
Institute of Physics of the Earth

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AUCKLAND
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ITEM: 41
DATE:18/02/76

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DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- S 36.51
STATION LONGITUDE ---------- E 174.45
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Induction Magnetometer
RAW DATA ---------- Analog magnetic tape
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- 35 mm film spectra
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. J. R. Storey
University of Auckland
Physics Department
Auckland
New Zealand

ADDRESS FOR INFORMATION ABOUT DATA -------- Dr. B. J. Fraser
Newcastle University
Physics Department
Newcastle NSW
Australia 2308

ADDITIONAL COMMENTS ----- Special purpose data available after 6 months. Dat
are available depending on circumstances and volume

ADDITIONAL COMMENTS -----

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BOROK

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ITEM: 837
DATE:00/00/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 58.03
STATION LONGITUDE ----------	E 38.33
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	08/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Pulsations 0.001-1 Hz
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Analog magnetic tape, strip chart
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. V. A. Troitskaya Institute of Physics of the Earth 10, Bolshaya Gruzinskaya Moscow USSR 123242
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above

ADDITIONAL COMMENTS ------

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D02 Magnetospheric M

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BOULDER
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ITEM: 69
DATE:16/04/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 40.14
STATION LONGITUDE ----------	E 254.76
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	09/1962 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Induction loop. Geomagnetic field fluctuations, 4.0 to 0.003c/s, 2m; 16,000 turns; air conduction loop antenna, 3 inch/h chart (ink), 1 inch/min F.M. magnetic tape.
RAW DATA ----------	Ink chart, analog F.M. tape
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Wallace H. Campbell Theoretical and Applied Geophysics, US Federal Center Denver CO USA 80225
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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BOULDER
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ITEM: 925
DATE:18/03/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 39.98
STATION LONGITUDE ----------	E 254.72
ALTERNATE NAMES ----------	Boulder Observatory SOLTERWARN
DATES OF OPERATION ----------	1968 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Satellite X-ray, Particle and Magnetic Sensors, ATS-1, GOES-1, GOES-2; Geostationary satellites with X-ray, particle and magnetic sensors pro-

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eric Micropulsation Phenomena (Cont.)

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BUDKOV
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ITEM: 820
DATE:00/00/

DISCIPLINE	D02 Magnetospheric Micropulsation Phenome
STATION LATITUDE	N 49.07
STATION LONGITUDE	E 14.02
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction Magnetometer
RAW DATA	Strip charts
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Microfilm
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. K. Dobes Geophysical Inst, Czechosl Bocni II Prague Czechoslovakia 141 31
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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CAMDEN
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ITEM: 716
DATE:00/00/

DISCIPLINE	D02 Magnetospheric Micropulsation Phenome
STATION LATITUDE	S 32.75
STATION LONGITUDE	E 151.50
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction Magnetometer
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter, computer-p graphics
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	

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ITEM: 820
DATE:00/00/75

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-- D02 Magnetospheric Micropulsation Phenomena
-- N 49.07
-- E 14.02
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-- Regular
-- Induction Magnetometer
---------- Strip charts

ABLE AFTER ------- MONTHS
---------- Microfilm

OUT STATION ------ Dr. K. Dobes
Geophysical Inst, Czechoslovak Acad Sci
Bocni II
Prague
Czechoslovakia 141 31

OUT DATA ---------- Same as above

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ITEM: 716
DATE:00/00/75

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-- D02 Magnetospheric Micropulsation Phenomena
-- S 32.75
-- E 151.50
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-- Regular
-- Induction Magnetometer

ABLE AFTER -------- MONTHS
---------- Tabular matter, computer-produced
graphics

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BOULDER

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ITEM: 925
DATE: 18/03/75

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	N 39.98
STATION LONGITUDE	E 254.72
ALTERNATE NAMES	Boulder Observatory SOLTERWARN
DATES OF OPERATION	1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Satellite X-ray, Particle and Magnetic Sensors, ATS-1, GOES-1, GOES-2: Geostationary satellites with X-ray, particle and magnetic sensors provide continuous data to SOLTERWARN.
RAW DATA	Strip charts, magnetic tape
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip charts, magnetic tape
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Space Environment Services Center Space Environment Lab, ERL, NOAA 325 Broadway Boulder CO USA 80302
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of the US Operational Flare Patrol Network. Events are relayed to other Regional Warning Centers in real time.

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ITEM: 716

DATE: 00/00/75

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	S 32.75
STATION LONGITUDE	E 151.50
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction Magnetometer
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter, computer-produced graphics
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. B. J. Fraser Department of Physics University of Newcastle Newcastle N.S.W. Australia 2308
ADDRESS FOR INFORMATION ABOUT DATA	
ADDITIONAL COMMENTS	

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D02 Magnetospheric Mi

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CAMPBELL ISLAND
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ITEM: 81
DATE:12/03/76

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- S 52.50
STATION LONGITUDE ---------- E 169.20
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1976 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Induction Magnetometer. 2 meter diameter air-cored coils are the sensors. Approx. the 1 MHz to 5 MHz band (1000-0.2 s) are recorded FM on mag. tape together with IRIG-H time code (10 Hz carrier). The longer period pulsations are also recorded on strip charts. Recording is continuous.

RAW DATA ---------- Analog magnetic tape, strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 18 MONTHS
FORM OF REDUCED DATA ---------- Dynamic spectra on 35mm film; digitized on paper or mag tape

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. R. L. Dowden
Physics Dept., Univ. of Otago
Box 56
Dunedin
New Zealand

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- We are not equipped to copy large quantities of data. Specific events will be supplied where possible. This equipment is jointly operated by DSIR Physics and Eng. Lab. Geophysical Observatory, Univ. of Otago, and Univ. of Auckland. Indicated are data which will be available at Otago. Because the station is isolated, data can only be sent out during summer (Sept. to January). Special purpose data are usually available after 9 months.

Micropulsation Phenomena (Cont.)

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CASEY
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ITEM: 92
DATE:06/06/75

DISCIPLINE ---------- D02 Magnetospheric Micropulation Phenomena
STATION LATITUDE ---------- S 66.54
STATION LONGITUDE ---------- E 110.36
ALTERNATE NAMES ---------- REPSTAT
DATES OF OPERATION ---------- 03/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Geomagnetic Micropulsations. Pc1, Pc2, Pc3 events. Instrument has only Z component sensor coil. Output is continuously recorded on paper chart at 5 cm/min and frequency modulated on magnetic tape with 10 Hz center frequency and 40% modulation. Scaling is done at 100 times recording speed so that output is audible. Tape playback speed is 1.875 inch/s.

RAW DATA ---------- Paper chart, frequency modulated on magnetic tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 18 MONTHS
FORM OF REDUCED DATA ---------- Sonograms
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Casey Station
Antarctic Division
568 St. Kilda Road
Melbourne Victoria
Australia Vic. 3004

ADDRESS FOR INFORMATION ABOUT DATA -------- Director
Antarctic Division
568 St. Kilda Road
Melbourne Victoria
Autralia Vic. 3004

ADDITIONAL COMMENTS ----- A 3 component inductive instrument was installed at Wilkes in 1967 and operated til 1969. Wilkes (S66.26 E110.52) was shut down and the new inductiv instrument at Casey became operational 3/1970 and has been operating continuously except for repairs since then. NOTE: Wilkes was opened for the IGY by the USA and any data for the years til 1964 could perhaps be obtained from NSF or USARP.

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D02 Magnetospheric Mi

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CHICHIJIMA
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ITEM: 111
DATE:23/06/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 27.09
STATION LONGITUDE ----------	E 142.18
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1974 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Induction magnetometer: composed of parmalloy cored coils, dc amplifiers and FM 7-track magnetic tape recorder; 3 component (dx/dt, dy/dt, dz/dt) continuous observation; 0.0075 inch/s.
RAW DATA ----------	Analog magnetic tape (1/2 inch, 4600 feet)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	K. Yanagihara, Director Kakioka Magnetic Observatory Kakioka 595 Yasato-machi Ibaraki-ken Japan 315-01
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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COLLEGE

ITEM: 120
DATE:16/04/75

Micropulsation Phenomena (Cont.)

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COLLEGE
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ITEM: 121
DATE:05/06/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 64.86
STATION LONGITUDE ----------	E 212.15
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	09/1970 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Induction loop magnetometer. Micropulsations. 2 components H and D recorded continuously on direc tape at 24 inch/h. H component recorded continuously on strip chart at 6 inch/h.
RAW DATA ----------	Strip chart, analog magnetic tape
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Mr. Richard Heacock Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ITEM: 139
DATE:06/06/75

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COLLEGE

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ITEM: 120

DATE:16/04/75

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena

STATION LATITUDE ---------- N 64.86

STATION LONGITUDE ---------- E 212.17

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 08/1963 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- Induction loop. Geomagnetic field fluctuations: 4.0 to 0.003 c/s. 2 meter; 16000 turn; air core induction loop antenna. 3 inch/h chart (ink). 1 inch/min F.M. magnetic tape.

RAW DATA ---------- Ink chart, analog F.M. tape

DATA REDUCTION PRACTICE ---------- Special

REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS

FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Wallace H. Campbell
Theoretical and Applied Geophysics, USGS
Federal Center
Denver CO
USA 80225

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS ----- Co-investigator: Mr. Richard Heacock, Geophysical Inst, Univ of Alaska, Fairbanks, AK, USA, 99701.

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DAVIS
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ITEM: 139
DATE:06/06/75

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- S 68.58
STATION LONGITUDE ---------- E 77.96
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 03/1972 to present (H & D)
1970-1972, 1974 to present (Z)
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Induction Magnetometers, H, D, Z. Horizontal coils are 1.5 meters long of more than 100000 turns, made by Sokkisha Ltd. Are calibrated daily by rotating magnet, automatically. Z coils have 400000 turns and sensitivity 30 microV/gamma/Hz.
RAW DATA ---------- Analog magnetic tape, strip chart
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Magnetic tape, sonagrams
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Director
Antarctic Div., Dept. of Science
568 St. Kilda Road
Melbourne Victoria
Australia 3004

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Three channels on analog magnetic tape (FM center frequency 25 Hz) 2 vertical and 1 horizontal on strip chart. Special purpose data are usually available after 18 months.

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D02 Magnetospheric M

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DUNEDIN
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ITEM: 155
DATE:17/03/75

DISCIPLINE ----------	DØ2 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	S 45.79
STATION LONGITUDE ----------	E 170.48
ALTERNATE NAMES ----------	Swampy Summit
DATES OF OPERATION ----------	Ø2/1967 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Horizontal loop approx. 5x1ØE04 m-sq with galvanometer amplifier, Pcl to Pc3 Micropulsations, buried 2 turn horizontal loop (approx 5x1ØE04 m-sq) with galvanometer amplifier and tape recorder. Direct recording is used at a tape speed of 15 inch/h. Timing is at present accurate to approx. 1 s but will shortly be upgraded to approx. 1Ø s. Recording is continuous as far as possible with some gaps in early data.
RAW DATA ----------	Analog magnetic tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	35 mm film of Dynamic Spectra
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. R. L. Dowden Physics Dept., Univ. of Otago Box 56 Dunedin New Zealand
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data usually available after 12-24 months. A station on Campbell Island is planned for Ø9/1975 in cooperation with U. of Auckland and N. Z. DSIR Geophysical Obs. Time code will be IRIG-H on 1Ø Hz. In 1976 IRIG-H on 1Ø Hz carrier may be added to the Dunedin Station

Micropulsation Phenomena (Cont.)

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EARLYBURN

ITEM: 1088
DATE:29/04/76

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DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 55.73
STATION LONGITUDE ----------	E 356.77
ALTERNATE NAMES ----------	Eddleston
DATES OF OPERATION ----------	1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	IGS-type Rubidium vector magnetometer, rubidiu vapour sensor, bias coils give Z, NE, NW compo nent, continuous recordings (from 6/1971 to 1/1975) on paper chart with speed 12 mm/min; f 1/1/1975 recording digitally on casettes at 2. sample rate); resolution 1/40 nT; timing accur of digital records 0.2 s absolute.
RAW DATA ----------	Paper chart, digital on 1/2 inc machine compatible tape
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Reduced data is for specific an ysis and may be in several form
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Director Institute of Geological Science Herstmonceux Castle Hailsham Sussex UK
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Part of UK network in Scandinavia, Iceland, and Newfoundland for IMS. In addition British Antarctic Survey operate identical instruments at Halley Bay and South Georgia. Information can be obtained from: Geomagnetism Unit, Inst. of Geological Sciences, 6, South Oswald Road, Edinburgh Scotland EH9 2HX.

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EBRO

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AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

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11 OF 13
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EBRO
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ITEM: 627
DATE:06/06/75

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 40.82
STATION LONGITUDE ---------- E .49
ALTERNATE NAMES ---------- Tortosa
DATES OF OPERATION ---------- 10/1965 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Selzer type barre-fluxmeter, micropulsations, regularly, 12/mm/m
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Observatorio del Ebro
Roquetas Tarragona
Spain

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ End of operation 1953 due to interference from electric railway.

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D02 Magnetospheric Mic

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ESKDALEMUIR
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ITEM: 166
DATE:29/04/76

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 55.32
STATION LONGITUDE ----------	E 356.80
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	IGS type Rubidium vector mangetometer, rubidium-vapor sensor, bias coils to give Z, NE and NW components. Continuous record onto paper chart, 3-channel, 12.5 mm/minute; also digitally onto casette at 2.5 second sample rate.
RAW DATA ----------	Paper chart, digital magnetic tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	M/R Magnetic Tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Director Institute of Geological Sciences Herstmonceux Castle Hailsham Sussex UK BN27 1RP
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Part of UK network

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etospheric Micropulsation Phenomena (Cont.)

I: 166
:29/04/76

Phenomena

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BN27 1RP

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ESKDALEMUIR
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DISCIPLINE	DØ2 Magnetospheric Micropulsati
STATION LATITUDE	N 55.32
STATION LONGITUDE	E 356.80
ALTERNATE NAMES	
DATES OF OPERATION	08/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Vector Rubidium Magnetometer. Broad Band recording allows rel other activity to be seen). Fr 01/10/1975 recordings on paper 12 mm/min). From 01/10/1975 re cassettes. Resolution 1/40 nT. of digital records 0.2 s absolu
RAW DATA	Digital on 1/2
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Reduced data a ysis and may be
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes, Edinburgh
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Geomagnetism Un Eskdalemuir Obs Nr. Lansholm Dumfriesshire Scotland
ADDRESS FOR INFORMATION ABOUT DATA	Dr. W. F. Stuar Geomagnetism Un 6, South Oswald Edinburgh Scotland EH9 2HX
ADDITIONAL COMMENTS	The array of stations reported her of deployments in Scandinavia, Ice and Newfoundland for IMS. In addi Antarctic Survey operate identical at Halley Bay and South Georgia. data usually available after 12 mo

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omena (Cont.)

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ITEM: 167
DATE:02/06/75

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---------- DØ2 Magnetospheric Micropulsation Phenomena
---------- N 55.32
---------- E 356.80

--------- 08/1970 to present
--------- Regular
PTION ----- Vector Rubidium Magnetometer. Pulsations (Note: Broad Band recording allows relationship with other activity to be seen). From 08/1970 until 01/10/1975 recordings on paper chart (chart speed 12 mm/min). From 01/10/1975 recording digital on cassettes. Resolution 1/40 nT. Timing accuracy of digital records 0.2 s absolute.

---------- Digital on 1/2 inch machine compatible tape
ACTICE ---------- Special
ATA AVAILABLE AFTER ------ MONTHS
ATA ---------- Reduced data are for specific analysis and may be in several forms

BLISHED ----------
A ----------
B ----------
C ---------- Yes, Edinburgh (Scotland)
REQUEST ---------- Yes
MATION ABOUT STATION ----- Geomagnetism Unit
Eskdalemuir Observatory
Nr. Lansholm
Dumfriesshire
Scotland

MATION ABOUT DATA --------
Dr. W. F. Stuart
Geomagnetism Unit
6, South Oswald Road
Edinburgh
Scotland
EH9 2HX

TS ----- The array of stations reported here is the basis of deployments in Scandinavia, Iceland, Faeroes and Newfoundland for IMS. In addition, British Antarctic Survey operate identical instruments at Halley Bay and South Georgia. Special purpose data usually available after 12 months.

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D02 Magnetospheric M

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FUERSTENFELDBRUCK
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ITEM: 183
DATE:11/07/75

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 48.17
STATION LONGITUDE ---------- E 11.28
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 12/1959 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Grenet-Type variometers (modified in own workshop) (Induction), Classical photo-recording with galvanometers, quick-run (6mm/min).
RAW DATA ---------- Photorecorded graphics
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Geophysikalisches Obs Fuerstenfeldbruc
Universitat Munchen
Ludwigshohe 8
FuerstenfeldbruBavaria
Fed Rep Germany D 8080

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Grenet-Type variometers serve in a chain of stations distributed by Institut of Geophysics, University of Gottingen. Special statistical processing by own scheme.

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ic Micropulsation Phenomena (Cont.)

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HALLEY BAY
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ITEM: 233
DATE:20/06/75

DISCIPLINE ----------	DØ2 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	S 75.52
STATION LONGITUDE ----------	E 333.22
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	Ø7/1972 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Rubidium Vapour Magnetometer (IGS model), mag tic pulsation studies, records of skew D and (Stuart, Rep. Prog. Phys., 1972, 35, 803-881) sensitivity about Ø.1 gamma/mm, chart speed 3Ø cm/h.
RAW DATA ----------	Strip chart, casette magnetic tape
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	W. M. Sievwright British Antarctic Survey Drummond Street Edinburgh Scotland EH8 9UA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Station on moving ice shelf. Position not known to one hundredth of a degree.

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ITEM: 246

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GREAT WHALE RIVER

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ITEM: 218

DATE:16/04/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 55.26
STATION LONGITUDE ----------	E 282.22
ALTERNATE NAMES ----------	Great Whale
DATES OF OPERATION ----------	07/1963 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Induction loop, geomagnetic field fluctuations 4.0 to 0.003 c/s, 2 m, 16 000 turn, air core induction loop antenna, 3 inch/h chart (ink), 1 inch/min F.M. magnetic tape.
RAW DATA ----------	Ink chart, analog F.M. tape
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON *REQUEST* ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Wallace H. Campbell Theoretical & Applied Geophysics, USGS Federal Center Denver CO USA 80225
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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HARTLAND
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ITEM: 240
DATE:29/04/75

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 50.99
STATION LONGITUDE ---------- E 355.52
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1971 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- IGS type Rubidium vector magnetometer, Rubidium vapour sensor, bias coils to give Z, NE and NW components, continuous paper chart, 3 channel, 12.5 mm/min, also digitally on casette tape at 2.5 second sample rate.
RAW DATA ---------- Paper chart, digital magnetic tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- M/R magnetic tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Director
Institute of Geological Sciences
Herstmonceux Castle
Hailsham Sussex
UK BN27 1RP

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Part of UK network.

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D02 Magnetospheric Mi

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HARTLAND
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ITEM: 241
DATE:02/06/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 51.00
STATION LONGITUDE ----------	E 355.52
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1970 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Vector Rubidium Magnetometer, pulsations (Note - Broad Band recording allows relationship with other activity to be seen.). From 10/1970 until 1/7/1975 recordings on paper chart (chart speed 12 mm/min). From 1/7/1975 recording digital on casettes. Resolution 1/40 nT. Timing accuracy of digital records 0.2 s absolute.
RAW DATA ----------	Digital on 1/2 inch machine compatible tape
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes IGS, Geomagnetism Unit, Edinburgh
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Geomagnetism Unit Hartland Observatory Nr. Bideford Devon England
ADDRESS FOR INFORMATION ABOUT DATA --------	Dr. W. F. Stuart Geomagnetism Unit 6, South Oswald Road Edinburgh Scotland EH9 2HX
ADDITIONAL COMMENTS -----	Reduced data is for specific analysis and may be in several forms, usually available after 12 months. The array of stations reported here is the basis of deployments in Scandinavia, Iceland, Faeroes and Newfoundland for IMS. In addition British Antarctic Survey operate identical instruments at Halley Bay and South Georgia.

Micropulsation Phenomena (Cont.)

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HEISS ISLAND
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ITEM: 839
DATE:00/00/75

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	N 80.62
STATION LONGITUDE	E 58.05
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Pulsations 0.005-1 Hz
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip chart
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. V. A. Troitskaya Institute of Physics of the Ea 10, Bolshaya Gruzinskaya Moscow USSR 123242
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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HERMANUS
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ITEM: 250
DATE:18/04/75

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	S 34.42
STATION LONGITUDE	E 19.22
ALTERNATE NAMES	
DATES OF OPERATION	04/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction magnetometer (Bar fluxmeter) with SEFRAM photodyne recorder, chart speed 6 mm/m continuous recording of variations in D and H frequency range 0.3 to 0.003 Hz. Nominal sen tivity 12.5 mm/nT (0.08 nT/mm).
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables of magnetic pulsation SSCs, etc.

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HERMANUS
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ITEM: 250
DATE:18/04/75

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	S 34.42
STATION LONGITUDE	E 19.22
ALTERNATE NAMES	
DATES OF OPERATION	04/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction magnetometer (Bar fluxmeter) with SEFRAM photodyne recorder, chart speed 6 mm/min, continuous recording of variations in D and H in frequency range 0.3 to 0.003 Hz. Nominal sensitivity 12.5 mm/nT (0.08 nT/mm).
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables of magnetic pulsation data, SSCs, etc.
DATA ROUTINELY PUBLISHED	MAGNETIC BULLETIN (Hermanus) monthly report distributed on exchange basis
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Kyoto; Hailsham
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Magnetic Observatory (CSIR) P.O. Box 32 Hermanus Rep of So Africa 7200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data available on request are copies of records of specific events only. Prior to 4/1963 pulsations were recorded with a La Cour rapid run magnetometer.

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D02 Magnetospheric Mi

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HERMANUS
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ITEM: 1157
DATE:03/02/76

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	S 34.42
STATION LONGITUDE ----------	E 19.23
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1963 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Induction Magnetometer, continuous graphical records of magnetic H and D pulsations.
RAW DATA ----------	Photorecorded graphics
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	Photorecorded graphics
DATA ROUTINELY PUBLISHED ----------	HERMANUS MAGNETIC OBSERVATORY BULLETIN (monthly) lists times of occurrence of magnetic pulsations
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes Copenhagen, Kyoto
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Mr. A. M. Van Wijk Hermanus Magnetic Observatory P.O. Box 32 Hermanus South Africa 7200
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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agnetospheric Micropulsation Phenomena (Cont.)

ITEM: 1157
DATE:03/02/76

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KANOYA
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DISCIPLINE	D02 Magnetospheric Micropu
STATION LATITUDE	N 31.42
STATION LONGITUDE	E 130.88
ALTERNATE NAMES	
DATES OF OPERATION	01/1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction Magnetometer con cored-coils, dc amplifiers tape recorder and visible component (dx/dt, dy/dt, d vations, chart speed 6 mm/ 0.015 inch/s.
RAW DATA	Strip chart tape (1/2 i
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 M
FORM OF REDUCED DATA	Tables, mic
DATA ROUTINELY PUBLISHED	Report of t electric ob variation),
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Kyoto, Japa
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	K. Yanagiha Kakioka Mag Kakioka 595 Yasato-mach Japan
ADDRESS FOR INFORMATION ABOUT DATA	Same as abo
ADDITIONAL COMMENTS	

ITEM: 292
DATE:12/04/76

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omena (Cont.)

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ITEM: 296
DATE:23/06/75

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---------- D02 Magnetospheric Micropulsation Phenomena
---------- N 31.42
E ---------- E 130.88

ON --------- 01/1958 to present
LE --------- Regular
IPTION ----- Induction Magnetometer composed of parmalloy cored-coils, dc amplifiers, FM 7 track magnetic tape recorder and visible chart recorder; three component (dx/dt, dy/dt, dz/dt) continuous observations, chart speed 6 mm/min, tape speed 0.015 inch/s.

---------- Strip chart, analog magnetic tape (1/2 inch, 3600 feet)
RACTICE ---------- Regular
DATA AVAILABLE AFTER ------ 3 MONTHS
DATA ---------- Tables, microfilm
UBLISHED ---------- Report of the geomagnetic and geoelectric observations (rapid variation), annual report
-A ---------- Yes
-B ----------
-C ---------- Yes
Kyoto, Japan
N REQUEST ---------- Yes
RMATION ABOUT STATION ----- K. Yanagihara, Director
Kakioka Magnetic Observatory
Kakioka 595
Yasato-machi Ibaraki-ken
Japan 315-01

RMATION ABOUT DATA -------- Same as above
NTS -----

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KAKIOKA

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ITEM: 292
DATE:12/04/76

DISCIPLINE ---------- D02 Magnetospheric Micropulsations Phenomena
STATION LATITUDE ---------- N 36.23
STATION LONGITUDE ---------- E 140.19
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 06/1976 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Induction Magnetometer
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- K. Yanagihara, Director
Kakioka Magnetic Observatory
Kakioka 595
Yasato-machi Ibaraki-ken
Japan 315-01

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 1 month.

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D02 Magnetospheric Mi

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KERGUELEN
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ITEM: 306
DATE:27/01/76

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	S 49.44
STATION LONGITUDE	E 70.42
ALTERNATE NAMES	Port aux Francais
DATES OF OPERATION	02/1964 to present 1975 station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Fluxmeter (3 components), ULF emission, continuous tape recording from 0.3 to 5 Hz.
RAW DATA	Strip chart (30 mm/min), analog magnetic tape
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Monsieur le Dir. des Lab. Scientifiques T.A.A.F. 27 rue Oudinot Paris France 75700
ADDRESS FOR INFORMATION ABOUT DATA	Madame S. Perraut C.N.E.T./C.R.P.E. 38-40 rue du General Leclerc Issy les Moulineaux France 92131
ADDITIONAL COMMENTS	Station moved in 1975 (former location S49.35 E70.20).

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netospheric Micropulsation Phenomena (Cont.)

EM: 306
TE:27/01/76

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KINGSTON
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DISCIPLINE ----------	D02 Magnetospheric Micropulsat
STATION LATITUDE ----------	N 41.31
STATION LONGITUDE ----------	E 288.27
ALTERNATE NAMES ----------	Univ of Rhode Island - ELF
DATES OF OPERATION ----------	01/1967 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	ELF (extremely low frequency) tric field receivers, 3-30 Hz, ponents of horizontal magnetic coils, 44 000 turns, 2 m diame about 1 milligamma/sq root of electric field: 10 m high ball ing is continuous (except duri storms) on 0.0375 ips magnetic
RAW DATA ----------	Analog magnetic
DATA REDUCTION PRACTICE ----------	Regular , S
REGULAR REDUCED DATA AVAILABLE AFTER ------	4 MONTH
FORM OF REDUCED DATA ----------	Graphical plots
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Charles Polk University of R Department of E Kingston USA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Description of electric field equ tion in IEEE TRANSACTIONS ON ANTE TION, Vol AP-21, No 4, July 1973, Station description in AFGL GEOPH DATA BULLETIN, Vol X, No 1, 1973. purpose data (power spectra of se available after 4 months on digit Also available are paper charts s of data periods and unusual level Regular data are summaries of amp

ena (Cont.)

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ITEM: 970
DATE:22/05/75

----- D02 Magnetospheric Micropulsation Phenomena
----- N 41.31
----- E 288.27
----- Univ of Rhode Island - ELF
----- 01/1967 to present
Intermittent operation
----- Regular
----- ELF (extremely low frequency) magnetic and electric field receivers, 3-30 Hz, 2 orthogonal components of horizontal magnetic field, vertical coils, 44 000 turns, 2 m diameter, sensitivity about 1 milligamma/sq root of Hz. Vertical electric field: 10 m high ball antenna. Recording is continuous (except during local thunderstorms) on 0.0375 ips magnetic tape.
---------- Analog magnetic tape
---------- Regular , Special
VAILABLE AFTER ------ 4 MONTHS
---------- Graphical plots
ED ----------

EST ---------- Yes
ABOUT STATION ----- Charles Polk
University of Rhode Island
Department of Electrical Engineering
Kingston RI
USA 02881

ABOUT DATA -------- Same as above
--- Description of electric field equipment and calibration in IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, Vol AP-21, No 4, July 1973, pp 514-523. Station description in AFGL GEOPHYSICS AND SPACE DATA BULLETIN, Vol X, No 1, 1973. Special purpose data (power spectra of selected periods) available after 4 months on digital magnetic tape. Also available are paper charts showing availability of data periods and unusual level changes. Regular data are summaries of amplitude data.

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D02 Magnetospheric M

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L AQUILA
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ITEM: 333
DATE:30/01/76

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 42.38
STATION LONGITUDE ---------- E 13.31
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 11/1967 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Induction Magnetometer
RAW DATA ---------- Photographs
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Microfilm
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Franco Molina
Istituto Nazionale di Geofisica
Via Ruggero Bonghi 11/B
Roma
Italy 00184

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Gap in operation -- 22/02/75-25/10/75.

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ITEM: 335
DATE:18/02/76

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agnetospheric Micropulsation Phenomena (Cont.)

ITEM: 333
DATE:30/01/76

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onghi 11/B

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/10/75.

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LERWICK
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DISCIPLINE ----------	D02 Magnetospheric Micropul
STATION LATITUDE ----------	N 60.13
STATION LONGITUDE ----------	E 358.82
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	IGS-type Rubidium vector ma ium vapour sensor, bias co NW components. Continuous nel, 12.5 mm/min, also dig tape at 2.5 s sample rate.
RAW DATA ----------	Paper chart, tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 M
FORM OF REDUCED DATA ----------	M/R magneti
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Director Institute o Herstmonceu Hailsham United King
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as abo
ADDITIONAL COMMENTS -----	Part of UK network.

ITEM: 335
DATE:18/02/76

tion Phenomena

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Special

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a (Cont.)

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ITEM: 344
DATE: 29/04/76

--- D02 Magnetospheric Micropulsation Phenomena
--- N 60.13
--- E 358.82

--- 1971 to present
--- Regular
--- IGS-type Rubidium vector magnetometer. Rubidium vapour sensor, bias coils to give Z, NE and NW components. Continuous paper chart, 3-channel, 12.5 mm/min, also digitally on casette tape at 2.5 s sample rate.

---------- Paper chart, digital magnetic tape
---------- Regular
LABLE AFTER ------ 2 MONTHS
---------- M/R magnetic tape

---------- Yes
BOUT STATION ----- Director
Institute of Geological Sciences
Herstmonceux Castle
Hailsham Sussex
United Kingdom BN27 1RP

BOUT DATA -------- Same as above
Part of UK network.

364

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LAUNCESTON
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ITEM: 335
DATE:18/02/76

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	S 41.67
STATION LONGITUDE ----------	E 147.16
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1966 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Induction Magnetometer
RAW DATA ----------	Analog magnetic tape
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Magnetic tape, computer-produced graphics
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. B. J. Fraser Newcastle University Physics Department NSW Australia 2308
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose observations are usually available after 6 months. WDC-A has 1968-1970 data listings.

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365

D02 Magnetospheric Mic

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LERWICK
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ITEM: 345
DATE:02/06/75

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	N 60.10
STATION LONGITUDE	E 358.82
ALTERNATE NAMES	
DATES OF OPERATION	08/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Vector Rubidium Magnetometer. Pulsations (Note - Broad Band recording allows relationship with other activity to be seen). From 08/1970 until 01/05/1975 recordings on paper chart (chart speed 12 mm/min). From 01/05/1975 recordings are digital on casettes. Resolution 1/40 nT. Timing accuracy of digital records 0.2 s absolute.
RAW DATA	Digital on 1/2 inch machine-compatible tape
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Reduced data is for specific analysis, in several forms
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Geomagnetism Unit Institute of Geological Sciences Lerwick Shetland Scotland
ADDRESS FOR INFORMATION ABOUT DATA	Dr. W. F. Stuart Geomagnetism Unit 6, South Oswald Road Edinburgh Scotland EH9 2HX
ADDITIONAL COMMENTS	The array of stations reported here is the basis of deployments in Scandinavia, Iceland, Faeroes and Newfoundland for IMS. In addition, British Antarctic Survey operate identical instruments at Halley Bay and South Georgia. Special purpose reduction of data usually available after 12 months.

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lagnetospheric Micropulsation Phenomena (Cont.)

ITEM: 345
DATE:02/06/75

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, Iceland, Faeroes
addition, British
tical instruments at
Special purpose
llable after 12 months.

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MACQUARIE ISLAND
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DISCIPLINE	D02 Magnetospheric Micr
STATION LATITUDE	S 54.50
STATION LONGITUDE	E 158.95
ALTERNATE NAMES	
DATES OF OPERATION	1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Two systems, using same meters, but differing o tions. Outputs are bot kan system, AM recorded 6 feet/h, fast 60 inch/ variations FM recorded paper chart at 30 cm/h. ute, hour and 12-hour t
RAW DATA	Magnetic
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Director Antarcti 568 St K Melbourn Australi
ADDRESS FOR INFORMATION ABOUT DATA	Same as
ADDITIONAL COMMENTS	Third system operational i Newcastle, N.S.W. Australi data for the Alaskan syste Heacock, Geophysical Inst, Alaska, USA 99701. Specia after 18 months.

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mena (Cont.)

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ITEM: 377
DATE:06/06/75

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---------- D02 Magnetospheric Micropulsation Phenomena
---------- S 54.50
---------- E 158.95

---------- 1967 to present
---------- Regular
ION ------ Two systems, using same sensors and microvoltmeters, but differing outputs: Micropulsations. Outputs are both continuous. (1) Alaskan system, AM recorded on two tape decks, slow 6 feet/h, fast 60 inch/h. (2) ANARE system, variations FM recorded on magnetic tape and paper chart at 30 cm/h. Both systems have minute, hour and 12-hour time marks.

---------- Magnetic tape, paper chart
TICE ---------- Special , None
A AVAILABLE AFTER ------ MONTHS
A ----------
ISHED ----------

EQUEST ---------- Yes
TION ABOUT STATION ----- Director
Antarctic Division, Dept. of Science
568 St Kilda Road
Melbourne Victoria
Australia 3004

TION ABOUT DATA -------- Same as above
----- Third system operational in 1975 - built for Univ of Newcastle, N.S.W. Australia. For information about data for the Alaskan system, contact Dr. R. R. Heacock, Geophysical Inst, Univ of Alaska, College, Alaska, USA 99701. Special purpose data available after 18 months.

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ITEM: 379
DATE:18/02/76

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Alaska, USA 99701. Special purpose data available after 18 months.

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MACQUARIE ISLAND

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ITEM: 379

DATE:18/02/76

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	S 54.50
STATION LONGITUDE	E 158.95
ALTERNATE NAMES	
DATES OF OPERATION	04/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction Magnetometer
RAW DATA	Analog Magnetic tape
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	35 mm film spectra
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. B. J. Fraser Newcastle University Physics Department N.S.W. Australia 2308
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data are available on request depending on circumstances and volume. Special purpose data are available after 6 months.

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366

D02 Magnetospheric M

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MANILA
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ITEM: 1002
DATE:03/06/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 14.64
STATION LONGITUDE ----------	E 121.08
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	10/1973 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Heliflux Station Magnetometer, Model HSM-1, 24 h run, 1.5 inch/h, routine station observations. Since 10/1973 an attachment was made to record micropulsations. Chart speed 35 inch/h.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1/30 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	The Director Manila Observatory P.O. Box 1231 Manila Philippines
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

Micropulsation Phenomena (Cont.)

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MIRNY
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ITEM: 838
DATE:00/00/75

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 66.58
STATION LONGITUDE ---------- E 93.02
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Pulsations 0.001-1 Hz
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Analog magnetic tape, strip char
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------- Prof. V. A. Troitskaya
Institute of Physics of the Eart
10, Bolshaya Gruzinskaya
Moscow
USSR 123242

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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MUNDARING
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ITEM: 420
DATE:18/02/76

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MEMAMBETSU
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ITEM: 396
DATE: 23/06/75

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	N 43.91
STATION LONGITUDE	E 144.19
ALTERNATE NAMES	
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction Magnetometer: composed of parmalloy cored-coils, dc amplifiers, FM seven track magnetic tape recorder and visible chart recorder: three component (dx/dt, dy/dt, dz/dt) continuous observation, chart speed 6 mm/min, tape speed 0.015 inch/s.
RAW DATA	Strip chart, analog magnetic tape (1/2 inch, 3600 feet)
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables, microfilm
DATA ROUTINELY PUBLISHED	REPORT OF THE GEOMAGNETIC AND GEOELECTRIC OBSERVATIONS (RAPID VARIATION), annual report
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Kyoto, Japan
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	K. Yanagihara, Director Kakioka Magnetic Observatory Kakioka 595 Yasato-machi Ibaraki-ken Japan 315-01
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MUNDARING
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ITEM: 420
DATE: 18/02/76

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- S 32.00
STATION LONGITUDE ---------- E 116.20
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 03/1975 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Induction Magnetometer
RAW DATA ---------- Analog magnetic tape
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 2 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. B. J. Fraser
Physics Department
Newcastle University
Newcastle NSW
Australia 2308

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data usually available after 6 months.

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D02 Magnetospheric Micropulsation Phenomena (Cont.)

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NAGYCENK
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ITEM: 426
DATE:21/01/76

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	N 47.63
STATION LONGITUDE	E 16.72
ALTERNATE NAMES	
DATES OF OPERATION	08/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Earth currents recorder (& MTV-2 type variometer) Rapid Run Magnetometer. Earth current recording on RWD with chart speed of 2 cm/min. Earth current recording continuously with chart speed of 6 mm/min. Geomagnetic recording on special intervals with MTV-2 type variometer(made in Hungary). Scale value 0.01 Tesla/mm on the chart.
RAW DATA	Photographic paper, strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables of the pulsations indices
DATA ROUTINELY PUBLISHED	Geophysical Observatory Reports, Observatory of Nagycenk, MTA GGKI, H-Sopron, S401 Pf 5, Hungary
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. Adam MTA GGKI Muzeum - u. 6-8, P.O.B. 5 Sopron Hungary H-S401
ADDRESS FOR INFORMATION ABOUT DATA	Dr. J. Vero MTA GGKI Muzeum - u. 6-8, P.O.B. 5 Sopron Hungary H-S401
ADDITIONAL COMMENTS	

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NEWCASTLE
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ITEM: 434
DATE: 18/02/76

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 32.75
STATION LONGITUDE ---------- E 151.50
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 10/1966 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Induction magnetometer, continuous observations
RAW DATA ---------- Analog magnetic tape
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- 35mm film spectra
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. B. J. Fraser
Physics Dept
Newcastle University
Newcastle NSW
Australia 2308

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data usually available after 6 months. Data are available on request depending on circumstances and volume. WDC-A at Boulder has 1968 to 1970 data listings.

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NEWPORT
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ITEM: 435
DATE:12/02/76

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	N 48.26
STATION LONGITUDE	E 242.88
ALTERNATE NAMES	
DATES OF OPERATION	04/1966 to present
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	Induction Magnetometer
RAW DATA	Photorecorded graphics, digital magnetic tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Photorecorded graphics, digital magnetic tape
DATA ROUTINELY PUBLISHED	WDC-A furnishes hourly value tables, hourly values and some 2.5 minute values on magnetic tape and copies of magnetograms.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Arthur W. Green USGS, Denver Federal Center Mail Stop 964, Box 25046 Denver CO USA 80225
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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D02 Magnetospheric Micropulsation Phenomena (Cont.)

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NIEMEGK
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ITEM: 1010
DATE:18/03/76

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	N 52.07
STATION LONGITUDE	E 12.68
ALTERNATE NAMES	Potsdam Seddin
DATES OF OPERATION	01/1890 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction Magnetometer; Normal Magnetometer: 3 systems; 1 storm system; Earth currents. Normal recordings 20mm/h or 60 mm/h about 2nT/mm or 0.31 /mm, Earth Currents (geogr. E-W and N-S) 3 system with 200m, 1000m and about 30km or 40km; 20mm/h about 0.2-0.5mV/km/mm; X,Y,Z changes 6mm/min or 20mm/min 0.02; 0.002nT/s/mm Earth Current (1000m) 6mm/min about 0.1-0.2mV/km/mm, Proton Magnetometer F Z Y, Monthly Review and Yearbook.
RAW DATA	Photographic paper, strip chart, digital magnetic tape
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	List, microfilm, magnetic and pape tape, computer printouts
DATA ROUTINELY PUBLISHED	Monthly Review and Magnetic Yearbook of the Adolf-Schmidt-Observatory
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Copenhagen
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Klaus Lengning Adolf-Schmidt-Obs Erdmagnetismus Niemeg Lindenstr. 7 Niemegk Kreis Belzig DDR 1824
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station moved: 01/1890 Potsdam (N52.38 E13.07), 01/1908 Seddin (N52.28 E13.02), 1/1932 Niemegk. Normal Reg. and Earth currents are on photographic paper, Proton Magnetometer data on digital (1 date/ 60s) strip chart, Induction Magnetometer and Earth current on digital magnetic tape (10 dates/s) on the 3 World Days. Special purpose data available after 1 month.

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NGOYA

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ITEM: 760
DATE:00/00/75

DISCIPLINE ----------	DØ2 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	S 28.83
STATION LONGITUDE ----------	E 31.88
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Induction Magnetometer
RAW DATA ----------	Strip chart, magnetic tape
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Strip chart, magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. M. W. J. Scourfield Physics Dept, Univ of Natal King George V Avenue Durban Natal South Africa
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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NOVOLAZAREVSKAYA
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ITEM: 840
DATE: 00/00/75

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	S 70.77
STATION LONGITUDE	E 11.82
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Pulsations 0.005-1 Hz
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Strip chart
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. V. A. Troitskaya Institute of Physics of the Earth 10, Bolshaya Gruzinskaya Moscow USSR 123242
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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369

D02 Magnetospheric Micropulsation Phenomena (Cont.)

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OTTAWA
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ITEM: 451
DATE:12/01/76

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 45.20
STATION LONGITUDE ----------	E 284.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1974 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Induction magnetometer
RAW DATA ----------	Analog magnetic tape
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Analog magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Mr. Richard R. Heacock Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ITEM: 453

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POKER FLAT
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ITEM: 469
DATE:05/06/75

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 65.13
STATION LONGITUDE ---------- E 212.54
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1971 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Induction loop magnetometer, ferrite core, 3 components H,D,Z recorded on FM tape at 15/160 ips; recorded on direct tape at 12 inch/h.

RAW DATA ---------- Magnetic tape
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Mr. Richard Heacock
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS -----

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ITEM: 453
DATE:19/01/76

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 65.08
STATION LONGITUDE ---------- E 25.87
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1974 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Induction magnetometer
RAW DATA ---------- Strip chart, analog magnetic tape
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Jorma Kangas
Dept of Physics, Univ of Oulu
Linnanmaa
Oulu
Finland SF-90100

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- The station at Oulu belongs to a N-S network extending from L = 3.4 (Nurmijarvi) to L = 6.1 (Kevo). 5 similar stations are operated since August, 1975.

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ROBURENT

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ITEM: 750
DATE:00/00/75

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 44.30
STATION LONGITUDE ---------- E 7.88
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Induction Magnetometer
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Monthly and annual bulletins, microfilm
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Mario Bossolasco
Ist. Geofisico e Geodetico, Genoa Univ.
P.O. Box 3145
Genoa
Italy I-16100

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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D02 Magnetospheric Mic

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SANAE
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ITEM: 1045
DATE:18/02/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	S 70.31
STATION LONGITUDE ----------	E 357.64
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1970 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Fluxbar Magnetometer (H, D), geomagnetic pulsations 10-600s, continuous recording, chart speed 6mm/min, paper tape output.
RAW DATA ----------	Chart, paper tape
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Power spectra, polarization modograms
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. A. D. M. Walker Phyics Dept, Univ of Natal King George V Avenue Durban Rep So Africa 4000
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Co-investigators: Dr. M. Scourfield, Mr. M. Barker, Dr. A. Hughes (same address as above). Special purpose data available after 18 months.

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ITEM: 553

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Micropulsation Phenomena (Cont.)

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SIPLE
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ITEM: 555
DATE:13/03/75

DISCIPLINE ----------	D02 Magnetic Micropulsation Phenomena
STATION LATITUDE ----------	S 76.00
STATION LONGITUDE ----------	E 276.00
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1973 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Search Coil Magnetometer, Vector magnetic fluctuations .01 Hz to 10 Hz, 4 ft. permalloy rods (3 axis) with 5x10E05 turns of wire/preamp/A to convertor/magetic tape recorder. Continuous observations.
RAW DATA ----------	Digital tape
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Graphical plots of selected even
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	L. J. Cahill Space Service Center University of Minnesota Minneapolis MN USA 5545
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Plan conjugate station near Roberval, Quebec in operation by June, 1975. Special purpose data usually available after 12 months.

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SIDMOUTH
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ITEM: 553
DATE:11/07/75

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 50.67
STATION LONGITUDE ---------- E 356.75
ALTERNATE NAMES ---------- Norman Lockyer Observatory
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Fluxgate Magnetometer. Continuous chart records of micropulsations have been taken for the past few years. Period range 20-200 seconds.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Original charts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION -----

Dr. W. G. V. Rosser
Physics Department
University of Exeter
Exeter Devon
United Kingdom

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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SIPLE

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ITEM: 1048

DATE:03/03/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	S 76.00
STATION LONGITUDE ----------	E 276.00
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	12/1970 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Fluxgate Magnetometer, 2s samples of data on digital tape; also performance parameters
RAW DATA ----------	Digital magnetic tape, 2s pts., 7 track, 556 bpi
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Digital magnetic tape, 2s pts. 7 track, 556 bpi
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. L. J. Lanzerotti Bell Laboratories Murray Hill NJ USA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Conjugate to Northern Hemisphere. Special purpose data available after 12 months.

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371

D02 Magnetospheric Mi

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SODANKYLA
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ITEM: 564
DATE:16/04/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena	
STATION LATITUDE ----------	N	67.32
STATION LONGITUDE ----------	E	26.63
ALTERNATE NAMES ----------		
DATES OF OPERATION ----------		
OBSERVING SCHEDULE ----------	Regular	
INSTRUMENT DESCRIPTION -----	Induction loop. Geomagnetic field fluctuations; 4.0 to 0.003 c/s. 2 meter; 16000 turn; air core induction loop antenna. 3 inch/h chart (ink). 1 inch/min F.M. magnetic tape.	
RAW DATA ----------	Ink chart, analog F.M. tape	
DATA REDUCTION PRACTICE ----------	Special	
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS	
FORM OF REDUCED DATA ----------	Miscellaneous	
DATA ROUTINELY PUBLISHED ----------		
DATA SENT TO WDC-A ----------		
DATA SENT TO WDC-B ----------		
DATA SENT TO WDC-C ----------		
DATA AVAILABLE ON REQUEST ----------	Yes	
ADDRESS FOR INFORMATION ABOUT STATION -----	Wallace H. Campbell Theoretical and Applied Geophysics, USC Federal Center Denver CO USA 80225	
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above	
ADDITIONAL COMMENTS -----		

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ITEM: 568

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Micropulsation Phenomena (Cont.)

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STONYHURST
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ITEM: 578
DATE:07/05/76

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 53.84
STATION LONGITUDE ----------	E 357.53
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	08/1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	IGS-type rubidium vector magnetometer. Rubidium vapour sensor, bias coils to give Z, NE and NW components. Continuous record on to paper chart 3-channel, 12.5 mm/minute. Also, digitally onto casette at 2.5 second sample rate. Pulsations (Note: Broad Band recording allows relationship with other activity to be seen). From 08/1971 until 01/10/1975 recordings on paper chart (chart speed 12 mm/min.) From 01/10/1975 recording digital on casettes. Resolution 1/40 nT. Timing accuracy of digital records 0.2 s absolute.
RAW DATA ----------	Paper chart, digital magnetic tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	M/R magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Director Institute of Geological Sciences Herstmonceux Castle Hailsham Sussex

USGS

DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	M/R magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Director Institute of Geological Sciences Herstmonceux Castle Hailsham Sussex United Kingdom BN27 1RP
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Station is part of United Kingdom network. For additional information about station: Geomagnetism Unit, Stonyhurst College Obs, Whailley, Nr. Blackburn, Lancashire, England. For more information about the data: Dr. W. F. Stuart, Geomagnetism Unit, 6, So. Oswald Road, Edinburgh, Scotland EH9 2HX.

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SOUTH GEORGIA
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ITEM: 568
DATE:25/06/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	S 54.28
STATION LONGITUDE ----------	E 323.52
ALTERNATE NAMES ----------	King Edward Point
DATES OF OPERATION ----------	01/1975 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Rubidium Vapour Magnetometer (I.G.S. model). Magnetic pulsation studies. Records of skew D and Z (Stuart, Rep. Prog. Phys. 1972, 35, 803-881), sensitivity about 0.05 g/mm, chart speed 30 cm/h.
RAW DATA ----------	Strip chart (cassette magnetic tape to be introduced 12/1975)
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	W. M. Sievwright British Antarctic Survey Drummond Street Edinburgh Scotland EH8 9UA
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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372

D02 Magnetospheric Mi

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TENERIFE
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ITEM: 1054
DATE:06/06/75

DISCIPLINE ---------- D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ---------- N 28.48
STATION LONGITUDE ---------- E 343.72
ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 01/1961 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- La Cour Magnetometer, proton magnetometer, fluxmeter, D,H,Z variographs, absolute magnetometers: QHM, BMZ, declinometer, terrestrial inductor. D,H,Z variographs speeds 15, 180mm/h; pulsation recorder: absolute measurements of D,H,Z,I,F weekly

RAW DATA ---------- Film, photographic paper, tables
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, microfilm
DATA ROUTINELY PUBLISHED ---------- ANUARIOS DEL SERVICIO DE GEOMAGNETISMO Y AERONOMIA, Inst Geografico y Catastral, Madrid, available on exchange

DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Charlottenlund

DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- A. Garcia Cogollor
Observatorio Geofisico De Tenerife
Jose Murphy, 6
Tenerife Canary Islands
Spain

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Published data are tables of hourly and mean values, K indices, magnetic phenomena.

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ITEM: 609

Micropulsation Phenomena (Cont.)

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TOLEDO
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ITEM: 1061
DATE:06/06/75

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 39.88
STATION LONGITUDE ----------	E 355.95
ALTERNATE NAMES ----------	Obs Geofisico A. Rey Pastor
DATES OF OPERATION ----------	01/1947 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	La Cour Magnetometer, Proton Magnetometer, Fluxmeter and others, D,H,Z,F Variographs, absolute Magnetometers: QHM, BMZ, Declinometer, Terrestrial Inductor, 4 D,H,Z Variographs with speed 15-20-30-180mm/h; Micropulsation Recorder 12mm/inch; F Proton Magnetometer Recorder, absolute measurements of D,H,Z,F weekly
RAW DATA ----------	Film, photographic paper, tables
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Tables, microfilm
DATA ROUTINELY PUBLISHED ----------	ANUARIOS DEL SERVICIO DE GEOMAGNETISMO Y AERONOMIA, Inst Geografico y Catastral, Madrid, available on exchange
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes Charlottenlund
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Luis de Miguel Instituto Geografico y Catastral Gral Ibanez de Ibero, 3 Madrid Spain 3
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Publication contains tables of hourly and mean values, K indices, magnetic phenomena.

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THULE

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ITEM: 609

DATE:16/04/75

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	N 76.60
STATION LONGITUDE	E 291.20
ALTERNATE NAMES	GEOPOLE
DATES OF OPERATION	08/1966 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Induction loop, geomagnetic field fluctuations 4.0 to 0.003 c/s, 2 meter 16000 turn air core induction loop antenna, chart speed 3 inch/h, F.M. tape speed 1 inch/min.
RAW DATA	Ink chart, analog F.M. tape
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Miscellaneous
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Wallace H. Campbell Theoretical and Applied Geophysics, US Federal Center Denver CO USA 80225
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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373

D02 Magnetospheric Mic

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VALENTIA

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ITEM: 655
DATE: 29/04/76

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	N 51.93
STATION LONGITUDE ----------	E 349.75
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	09/1971 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	IGS-type Rubidium vector magnetometer, Rubidium vapor sensor; bias coils to give Z, NE and NW components, continuous paper chart, 3 channel 12.5 mm/minute; digitally on casette tape at 2.5 second sample rate since 01/06/1975. Resolution 1/40 nT. Timing accuracy of digital records 0.2s absolute. Broad band pulsation recording allows relationship with other activity to be seen.
RAW DATA ----------	Paper chart, digital mag tape (1/2 inch machine compatible)
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	2-12 MONTHS
FORM OF REDUCED DATA ----------	W/R magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	Director Institute of Geological Sciences Herstmonceux Castle Hailsham Sussex United Kingdom BN27 1RP
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	Part of United Kingdom network in Scandinavia, Iceland, Faeroes and Newfoundland for IMS. In addition British Antarctic Survey operate identical instruments at Halley Bay and South Georgia. For additional information about the station: Geomagnetism Unit, Valentia Obs., Cahirciveen, Co. Kerry, Ireland; about the data: Dr. W. F. Stuart, Geomagnetism Unit, 6, South Oswald Road, Edinburgh EH9 2HX.

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ITEM: 663

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etospheric Micropulsation Phenomena (Cont.)

M: 655
E:29/04/76

Phenomena

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WARNKENHAGEN
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DISCIPLINE ----------	D02 Magnetospheric Micropulsati
STATION LATITUDE ----------	N 54.00
STATION LONGITUDE ----------	E 11.07
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Induction Magnetometer, Rapid R Proton F-Magnetometer, Earth Cu Magnetometer; Magn. Norm.-Reg. system: Normal-Reg. 20mm/h, abo 0.43/mm and about 5nT/mm: Earth E-W and N-S) 150m and 100m, abo Y, Z, about 0.02 and Z 0.001nT/ paper 6mm/min, Proton Magnetome (1 date/60s).
RAW DATA ----------	Photographic pap for Proton Magne
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Photographic pap
DATA ROUTINELY PUBLISHED ----------	Review and speci YEARBOOK OF THE OBSERVATORY IN N
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Klaus Lengni Adolf-Schmidt-Ob Lindenstr. 7 Niemegk K German Dem Rep
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available aft

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(Cont.)

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ITEM: 1155
DATE:18/03/76

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--- D02 Magnetospheric Micropulsation Phenomena
--- N 54.00
--- E 11.07

--- 04/1957 to present
--- Regular
--- Induction Magnetometer, Rapid Run Magnetometer, Proton F-Magnetometer, Earth Currents, Standard Magnetometer; Magn. Norm.-Reg. 1 system, 1 storm system; Normal-Reg. 20mm/h, about 2.2nT/mm or 0.43/mm and about 5nT/mm; Earth Currents (geogr. E-W and N-S) 150m and 100m, about 0.5mV/km/mm, X, Y, Z, about 0.02 and Z 0.001nT/s/mm, photographic paper 6mm/min, Proton Magnetometer for F digital (1 date/60s).

---------- Photographic paper, strip chart for Proton Magnetometer

---------- Special

BLE AFTER ------ MONTHS

---------- Photographic paper, paper tape

---------- Review and special dates in the YEARBOOK OF THE ADOLF-SCHMIDT-OBSERVATORY IN NIEMEGK

---------- Yes

UT STATION ----- Dr. Klaus Lengning
Adolf-Schmidt-Obs fur Erdmag in Niemegk
Lindenstr. 7
Niemegk Kreis Belzig
German Dem Rep 1824 DDR

UT DATA -------- Same as above
Special purpose data available after 6 months.

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VOSTOK

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ITEM: 663
DATE:12/01/76

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE ----------	S 78.45
STATION LONGITUDE ----------	E 106.87
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1965 to present
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION ------	Induction magnetometer, 0.005-5 Hz
RAW DATA ----------	Analog magnetic tape
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Analog magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	Mr. Richard R. Heacock Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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374

D02 Magnetospheric Mi

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WINGST
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ITEM: 1072
DATE:29/04/75

DISCIPLINE ----------
D02 Magnetospheric Micropulsation Phenomena

STATION LATITUDE ---------- N 53.74
STATION LONGITUDE ---------- E 9.07
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 11/1950 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Induction Coil Magnetometer with mu-metal core, Mollgalvanometers for X and Y changes, Zernike galvanometer for Z changes: photographic recorder chart speed 360 mm/h, asymptotic scale values (long period) in nT/s/mm: 0.08 (dX/dt), 0.07 (dY/dt), 0.007 (dZ/dt), record changed daily.

RAW DATA ---------- Photographic paper
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 6 MONTHS
FORM OF REDUCED DATA ---------- Microfilm, photographic prints for single records
DATA ROUTINELY PUBLISHED ---------- Monthly Report: events (pc,pi, etc.), editor: Deutsches Hydrographisches Institut
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Deutsches Hydrographisches Institut
Bernhard-Nocht-Str. 78
Hamburg 4
Fed Rep Germany D 2000

ADDRESS FOR INFORMATION ABOUT DATA -------- Erdmagnetisches Observatorium Wingst
Am Olymp 13
Wingst
Fed Rep Germany D 2177

ADDITIONAL COMMENTS ----- Pulsation system Grenet-type variometer operated for Institut fur Geophysik, Gottingen. Special purpose data available after 1 month. Intermittent operation of dz/dt: 21/06/1973-06/06/1974, 09/07/1974-31/12/1974, 19/02/1975-present.

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etospheric Micropulsation Phenomena (Cont.)

: 1072
:29/04/75

Phenomena

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WITTEVEEN
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DISCIPLINE	D02 Magnetospheric Micropulsatio
STATION LATITUDE	N 52.82
STATION LONGITUDE	E 6.67
ALTERNATE NAMES	
DATES OF OPERATION	05/1967 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Bar Fluxmeter, induction magneto bars of mu-metal of molybdenum l diameter 2 cm, wound by 1450 m c (L=60 Henry). The bars are orie E-W, galvanometers (free oscilla about 10 s) record pulsations in range 2-60 s. Photographic reco system, 6 mm/min or 3 mm/min aft continuous recording, scale valu 0.15 g/mm.
RAW DATA	Photographic pape
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	D. van Sabben Royal Netherlands Utrechtseweg 297 De Bilt Netherlands
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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WOOMERA
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DISCIPLINE	D02 Magnetospheric Micropulsatio

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Cont.)

ITEM: 675
DATE:17/02/76

D02 Magnetospheric Micropulsation Phenomena
N 52.82
E 6.67

05/1967 to present
Regular
Bar Fluxmeter, induction magnetometer, two bars of mu-metal of molybdenum length 100 cm diameter 2 cm, wound by 1450 m copper wire (L=60 Henry). The bars are oriented N-S and E-W, galvanometers (free oscillation period about 10 s) record pulsations in the period range 2-60 s. Photographic recording La Cour system, 6 mm/min or 3 mm/min after 10/1974, continuous recording, scale values roughly 0.15 g/mm.
---------- Photographic paper
---------- None
AFTER ------ MONTHS

---------- Yes
TATION ----- D. van Sabben
Royal Netherlands Meteorological Inst.
Utrechtseweg 297
De Bilt
Netherlands

ATA -------- Same as above

ITEM: 676
DATE:18/02/76

02 Magnetospheric Micropulsation Phenomena
31.10

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WOOMERA

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ITEM: 676

DATE:18/02/76

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena	
STATION LATITUDE	S	31.10
STATION LONGITUDE	E	136.78
ALTERNATE NAMES		
DATES OF OPERATION	10/1967 to present	
OBSERVING SCHEDULE	Regular	
INSTRUMENT DESCRIPTION	Induction magnetometer	
RAW DATA		Analog magnetic tape
DATA REDUCTION PRACTICE		Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER		2 MONTHS
FORM OF REDUCED DATA		Film spectra (35 mm)
DATA ROUTINELY PUBLISHED		
DATA SENT TO WDC-A		
DATA SENT TO WDC-B		
DATA SENT TO WDC-C		
DATA AVAILABLE ON REQUEST		Yes
ADDRESS FOR INFORMATION ABOUT STATION		Dr. B. J. Fraser Physics Dept, Newcastle University NSW Australia 2308
ADDRESS FOR INFORMATION ABOUT DATA		Same as above
ADDITIONAL COMMENTS	Data are available on request depending on circumstances and volume required. WDC Boulder has 1968-1970 data listings.	

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D02 Magnetospheric Mi

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YORK
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ITEM: 686
DATE:29/04/76

DISCIPLINE ----------	D02 Magnetospheric Micropulsation Phenomena	
STATION LATITUDE ----------	N	53.97
STATION LONGITUDE ----------	E	358.92
ALTERNATE NAMES ----------		
DATES OF OPERATION ----------	1971 to present	
OBSERVING SCHEDULE ----------	Regular	
INSTRUMENT DESCRIPTION -----	IGS type Rubidium vector magnetometer, Rubidium vapor sensor; bias coils to give Z, NE and NW components. Continuous paper chart, 3-channel, 12.5 mm/minute; also digitally on casette tape at 2.5 second sample rate.	
RAW DATA ----------	Paper chart, digital magnetic tape	
DATA REDUCTION PRACTICE ----------	Regular	
REGULAR REDUCED DATA AVAILABLE AFTER ------	2	MONTHS
FORM OF REDUCED DATA ----------	M/R magnetic tape	
DATA ROUTINELY PUBLISHED ----------		
DATA SENT TO WDC-A ----------		
DATA SENT TO WDC-B ----------		
DATA SENT TO WDC-C ----------		
DATA AVAILABLE ON REQUEST ----------	Yes	
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. D. Orr University of York Heslington York United Kingdom	Y01 5DD
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above	
ADDITIONAL COMMENTS -----	Part of IMS network by U.K.	

Micropulsation Phenomena (Cont.)

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YORK
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ITEM: 687
DATE:02/06/75

DISCIPLINE	D02 Magnetospheric Micropulsation Phenomena
STATION LATITUDE	N 53.95
STATION LONGITUDE	E 358.95
ALTERNATE NAMES	
DATES OF OPERATION	03/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Vector Rubidium magnetometer, pulsations (Note: Broad Band recording allows relationship with other activity to be seen), from 3/1972 until 1/10/1975 recordings on paper chart (chart speed 12 mm/min.) From 1/10/1975 recording digital on casettes. Resolution 1/40 nT. Timing accuracy of digital records 0.2 s absolute.
RAW DATA	Digital on 1/2 inch machine compatible tape
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Reduced data for specific analysis, may be in several forms.
DATA ROUTINELY PUBLISHED	Not published on routine basis
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Geomagnetism Unit University of York Heslington Yorkshire England
ADDRESS FOR INFORMATION ABOUT DATA	Dr. W. F. Stuart Geomagnetism Unit 6, South Oswald Road Edinburgh Scotland EH 9 2 H X
ADDITIONAL COMMENTS	The array of stations reported here is the basis of deployments in Scandinavia, Iceland, Faeroes and Newfoundland for IMS. In addition British Antarcti Survey operate identical instruments at Halley Bay and South Georgia. Special purpose data available after 12 months.

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D03 Space Magnetism

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BOULDER
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ITEM: 926
DATE:18/03/75 1a

DISCIPLINE ---------- D03 Space Magnetism
STATION LATITUDE ---------- N 39.98
STATION LONGITUDE ---------- E 254.72
ALTERNATE NAMES ---------- Boulder Observatory
SOLTERWARN
DATES OF OPERATION ---------- 1963 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Satellite X-ray, Particle and Magnetic Sensors, ATS-1, GOES-1, GOES-2: Geostationary satellites with X-ray, particle and magnetic sensors provide continuous data to SOLTERWARN.

RAW DATA ---------- Strip charts, magnetic tape
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Strip charts, magnetic tape
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Space Environment Services Center
Space Environment Lab, ERL, NOAA
325 Broadway
Boulder CO
USA 80302

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Part of the US Operational Flare Patrol Network. Events are relayed to other Regional Warning Centers in real time.

E. Aurora

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E01 All-s

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ARCTIC VILLAGE
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ITEM: 26
DATE:05/06/75

DISCIPLINE ----------
E01 All-Sky Camera (Aurora)
STATION LATITUDE ---------- N 68.13
STATION LONGITUDE ---------- E 214.43
ALTERNATE NAMES ----------
DATES OF OPERATION ---------
11/1965 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- All-Sky Camera--1 picture every minute, seasonal with darkness.
RAW DATA ----------
16 mm film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
Prelimiary editing for Aurora
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Part of Univ. of Alaska N-S meridian chain thru Fairbanks.

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ITEM: 545

2

All-sky Camera

****
CAMPBELL ISLAND
****

ITEM: 82
DATE:05/03/75

DISCIPLINE	E01 All-Sky Camera (Aurora)
STATION LATITUDE	S 52.25
STATION LONGITUDE	E 169.15
ALTERNATE NAMES	
DATES OF OPERATION	1958 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	16 and 35 mm All-sky camera, 16 mm ASC 1958-196 35 mm ASC 1965-1974. 16 mm ASC 194-present. Approximately 1 exp/min when cloud free.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Film, tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. I. L. Thomas P.E.L. Auroral Station DSIR Omakau Central Otago New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

****

ARRIVAL HEIGHTS

****

ITEM: 545

DATE:13/03/75

DISCIPLINE	E01 All-Sky Camera (Aurora)
STATION LATITUDE	S 77.83
STATION LONGITUDE	E 166.65
ALTERNATE NAMES	Scott Base
DATES OF OPERATION	1958 to present Station moved Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	All-Sky Camera. Approximately one exposure per minute when cloud free.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Film, tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. I. L. Thomas P.E.L. Auroral Station DSIR Omakau Central Otago New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station shifted from Scott Base (S77.85 E166.75) 3 miles to Arrival Heights in 1963. 16mm ASC 1958-1963, 35mm ASC 1963 to present.

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379

E01 All-sky

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CASEY
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ITEM: 93
DATE:06/06/75

DISCIPLINE ---------- E01 All-Sky Camera (Aurora)
STATION LATITUDE ---------- S 66.54
STATION LONGITUDE ---------- E 110.36
ALTERNATE NAMES ---------- REPSTAT
DATES OF OPERATION ---------- 03/1970 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- All-Sky Camera, visual auroral events, the date and time are recorded on each frame. The instrument has a 179 degree field of view. It operates during months when it is sufficiently dark. Depending on conditions, the camera can be set to take 1 frame each min or 3 frames each 15 min. The 35 mm film is processed regularly but scaling is done on return to Australia.

RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 18 MONTHS
FORM OF REDUCED DATA ---------- Computer printout giving (a) a time group (b) a coordinate group

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Casey Station
Antarctic Division
568 St. Kilda Road
Melborne Victoria
Australia Vic. 3004

ADDRESS FOR INFORMATION ABOUT DATA -------- Director
Antarctic Division
568 St. Kilda Road
Melbourne Victoria
Australia Vic. 3004

ADDITIONAL COMMENTS ----- Casey was occupied in 1969 after Wilkes (S66.26 E110.52) was shut down. Casey data are available from 1969 to the present. From 3/1959 to 10/1963 16 mm film is available. From then til 1969 35 mm film is available on request. The camera is operated only during months when there is sufficient darkness, the dates being left to the discretion of the operator.

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CHATANIKA
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ITEM: 107
DATE:05/06/75

DISCIPLINE ---------- E01 All-Sky Camera (Aurora)
STATION LATITUDE ---------- N 65.10
STATION LONGITUDE ---------- E 212.57
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1973 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- All-Sky Camera. Pictures taken 1/min or faster, during dark season
RAW DATA ---------- 16 mm film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Preliminary editing for Aurora
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Part of Univ. of Alaska N-S meridian chain through Fairbanks.

****
CHELYUSKIN
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ITEM: 877
DATE:00/00/75

DISCIPLINE ---------- E01 All-sky Camera
STATION LATITUDE ---------- N 77.80
STATION LONGITUDE ---------- E 104.30
ALTERNATE NAMES ---------- Cape Chelyuskin
DATES OF OPERATION ---------- 12/1957 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ All-sky Camera
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. G. V. Starkov

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CHELYUSKIN

****

ITEM: 877
DATE:00/00/75

DISCIPLINE ---------- E01 All-sky Camera
STATION LATITUDE ---------- N 77.80
STATION LONGITUDE ---------- E 104.30
ALTERNATE NAMES ---------- Cape Chelyuskin
DATES OF OPERATION ---------- 12/1957 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ All-sky Camera
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. G. V. Starkov
Polar Geophysical Institute
Academy of Sciences of the USSR
Apatity Murmansk Region
USSR 184200

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS -------

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380

E01 All-sk

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COLLEGE
****

ITEM: 124
DATE:20/01/76

DISCIPLINE ----------	E01 All-Sky Camera (Aurora)
STATION LATITUDE ----------	N 64.86
STATION LONGITUDE ----------	E 212.15
ALTERNATE NAMES ----------	Fairbanks *Ester Dome Observatory* Poker Flat Research Range Chatanika
DATES OF OPERATION ---------	1955 to present
OBSERVING SCHEDULE ---------	Regular
INSTRUMENT DESCRIPTION -----	All-Sky Camera. 16 mm and 35 mm all-sky, dusk to dawn, 1 frame/min minimum.
RAW DATA ----------	Negative film, positive copies are available upon request.
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	G. J. Romick Geophysicial Institute Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA --------	M. J. Young, Archives Geophysicial Institute Fairbanks Alaska USA 99701
ADDITIONAL COMMENTS -----	

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DAVIS
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ITEM: 140
DATE:06/06/75

All-sky Camera (Cont.)

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DIXON
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ITEM: 876
DATE:00/00/75

DISCIPLINE	E01 All-sky Camera (Aurora)
STATION LATITUDE	N 73.50
STATION LONGITUDE	E 80.40
ALTERNATE NAMES	Dixon Island
DATES OF OPERATION	11/1957 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	All-sky Camera
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. G. V. Starkov Polar Geophysical Institute Academy of Sciences of the US Apatity Murmansk Regio USSR 184200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

****
FORT YUKON
****

ITEM: 178
DATE:10/06/75

DISCIPLINE	E01 All-sky Camera (Aurora)
STATION LATITUDE	N 66.56
STATION LONGITUDE	E 214.78
ALTERNATE NAMES	
DATES OF OPERATION	11/1968 to present Intermittent operation

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DAVIS
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ITEM: 140
DATE:06/06/75

DISCIPLINE ---------- E01 All-Sky Camera (Aurora)
STATION LATITUDE ---------- S 68.58
STATION LONGITUDE ---------- E 77.96
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 02/1969 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- All-sky camera - New Zealand manufacture, records, image of complete sky hemisphere as disc 2.5 cm in diameter normally at 1/min rate but can be switched to a 15 min program during poor conditions.
RAW DATA ---------- B & W (Monochrome) 35 mm film, 400 foot rolls (Ilford HPS)
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Computer printout
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Director
Antarctic Div., Dept. of Science
568 St. Kilda Road
Melbourne Victoria
Australia 3004

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data usually available after 18 months.

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FORT YUKON
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ITEM: 178
DATE:10/06/75

DISCIPLINE ---------- E01 All-sky Camera (Aurora)
STATION LATITUDE ---------- N 66.56
STATION LONGITUDE ---------- E 214.78
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 11/1968 to present
Intermittent operation
OBSERVING SCHEDULE --------- Occasional
INSTRUMENT DESCRIPTION ----- All-sky Camera. Exposure 1 per minute and faster, as required.
RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Part of ground support for Poker Flat Rocket Research Range.

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381

E01 All-sk

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FORT YUKON
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ITEM: 179
DATE:10/06/75

DISCIPLINE ---------- E01 All-sky Camera (Aurora)
STATION LATITUDE ---------- N 66.56
STATION LONGITUDE ---------- E 214.78
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 02/1958 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- All-sky Camera. 1 picture every minute, seasonal with dark, and occasional summer pictures for clouds.
RAW DATA ---------- 16mm film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Preliminary editing for Aurora
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Station is part of University of Alaska N-S meridian chain of stations thru Fairbanks.

****
GENERAL BELGRANO

ITEM: 912
DATE:02/06/75

All-sky Camera (Cont.)

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HALLEY BAY
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ITEM: 234
DATE: 20/06/75

DISCIPLINE	E01 All-sky Camera (Aurora)
STATION LATITUDE	S 75.52
STATION LONGITUDE	E 333.22
ALTERNATE NAMES	
DATES OF OPERATION	05/1956 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	SCAR 35 mm ASCA (16 mm Alaskan model prior to 4/1965), synoptic studies of auroral forms, exposures every quarter hour UT whenever the sky is dark and not obscured by clouds. Exposure frequency increased to 1/min when aurora appears more than 10 degrees above the horizon.
RAW DATA	Film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	W. M. Sievwright British Antarctic Survey Drummond Street Edinburgh Scotland EH8 9UA
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station on moving ice shelf, rebuilt twice since 1956 with resiting of instruments within 2 miles of old location. Position not known to one hundredth of a degree.

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GENERAL BELGRANO

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ITEM: 912
DATE: 02/06/75

DISCIPLINE ---------- E01 All-sky Camera
STATION LATITUDE ---------- S 77.97
STATION LONGITUDE ---------- E 321.20
ALTERNATE NAMES ---------- Belgrano
Gral Belgrano
DATES OF OPERATION ---------- 06/1962 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ All-sky Camera
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Horacio A. Cazeneuve
Instituto Antartico Argentino
Cerrito 1248
Buenos Aires
Argentina

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------- Special purpose data available after 4 months.
Data are published by Instituto Antartico Argentino
as scientific contributions.

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HEISS ISLAND

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ITEM: 878

DATE: 00/00/75

DISCIPLINE ---------- E01 All-sky Camera

STATION LATITUDE ---------- N 80.70

STATION LONGITUDE ---------- E 56.20

ALTERNATE NAMES ----------

Heise

DATES OF OPERATION ---------- 12/1957 to present

Intermittent operation

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ------ All-sky Camera

RAW DATA ----------

DATA REDUCTION PRACTICE ----------

REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS

FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ----------

ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. G. V. Starkov
Polar Geophysical Institute
Academy of Sciences of the USSR
Apatity Murmansk Region
USSR 184200

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above

ADDITIONAL COMMENTS -------

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382

E01 All-sk

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INUVIK
****

ITEM: 280
DATE:05/06/75

DISCIPLINE ---------- E01 All-sky Camera (Aurora)
STATION LATITUDE ---------- N 68.25
STATION LONGITUDE ---------- E 226.70
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 08/1969 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- All-sky camera, 1 picture every minute, seasonal with dark.

RAW DATA ---------- 16 mm film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Preliminary editing for aurora
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Part of Univ. of Alaska N-S meridian chain through Fairbanks.

****
KIRUNA

ITEM: 316
DATE:18/02/76

2

All-sky Camera (Cont.)

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LYCKSELE
****

ITEM: 371
DATE:18/02/7

DISCIPLINE ----------	E01 All-sky Camera (Aurora)
STATION LATITUDE ----------	N 64.62
STATION LONGITUDE ----------	E 18.67
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1970 to present
OBSERVING SCHEDULE ----------	
INSTRUMENT DESCRIPTION -----	All-sky Camera
RAW DATA ----------	16mm black/white film
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Ove Klang Ionospheric Observatory Boe 100 Lycksele Sweden S-921
ADDRESS FOR INFORMATION ABOUT DATA --------	Library Kiruna Geophysical Institut Kiruna Sweden S-981
ADDITIONAL COMMENTS -----	

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KIRUNA

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ITEM: 316
DATE:18/02/76

DISCIPLINE	E01 All-Sky Camera (Aurora)
STATION LATITUDE	N 67.84
STATION LONGITUDE	E 20.42
ALTERNATE NAMES	
DATES OF OPERATION	01/1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	All-Sky Camera, 16 mm black/white film, one picture/min.
RAW DATA	16 mm black/white film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Hourly values of auroral intensity and cloudiness
DATA ROUTINELY PUBLISHED	Catalog of data in KIRUNA GEOPHYSICAL DATA
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Library Kiruna Geophysical Institute Kiruna Sweden S-981 01
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MACQUARIE ISLAND
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ITEM: 380
DATE: 06/06/75

DISCIPLINE ---------- E01 All-sky Camera (Aurora)
STATION LATITUDE ---------- S 54.50
STATION LONGITUDE ---------- E 158.95
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1964 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Automatic one or 15 minute operation, manufactured in New Zealand.

RAW DATA ---------- 35mm monochrome microfilm
DATA REDUCTION PRACTICE ---------- Special , None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Computer printout
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Director
Antarctic Division
568 St Kilda Road
Melbourne Victoria
Australia 3004

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ----- Computer printout gives (a) time group, (b) position coordinate group of the aurora. Special purpose data available after 18 months.

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383

E01 All-sk

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MAWSON
****

ITEM: 693
DATE:06/06/75

DISCIPLINE ---------- E01 All-sky Camera (Aurora)
STATION LATITUDE ---------- S 67.61
STATION LONGITUDE ---------- E 62.88
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1954 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- All-sky camera, visual auroral events. The date and time are recorded on each frame. The instrument has a 179 degree field of view. It operates during hours of sufficient darkness. Exposures are variable and a cycle of one frame a minute or four frames at each 1/4 hour can be selected. The 35 mm film is processed regularly but all scaling is done in Australia.

RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 18 MONTHS
FORM OF REDUCED DATA ---------- Computer printout - time group, coordinate groups of aurorae

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Director
Antarctic Division, Dept. of Science
568 St. Kilda Road
Melbourne Victoria
Australia 3004

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- There are similar instruments operating at the bases Casey, Davis and Macquarie Island. Special purpose data available after 18 months.

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MIRNY

ITEM: 879
DATE:00/00/75

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l-sky Camera (Cont.)

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MOULD BAY

****

ITEM: 413
DATE: 05/06/75

DISCIPLINE	E01 All-Sky Camera (Aurora)
STATION LATITUDE	N 76.20
STATION LONGITUDE	E 240.60
ALTERNATE NAMES	
DATES OF OPERATION	10/1965 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	All-Sky Camera, 16mm, 1 picture every minute.
RAW DATA	16mm film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Photo print, film, preliminary editing for aurora
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Archives Geophysical Institute Univ of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Seasonal operation each year during dark condition This is part of the magnetic field line chain of stations through Fairbanks, Alaska.

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ITEM: 423

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MIRNY

****

ITEM: 879
DATE: 00/00/75

DISCIPLINE ---------- E01 All-sky Camera
STATION LATITUDE ---------- S 66.60
STATION LONGITUDE ---------- E 93.00
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 03/1957 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ All-sky Camera
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. G. V. Starkov
Polar Geophysical Institute
Academy of Sciences of the USSR
Apatity Murmansk Region
USSR 184200

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS -----

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MURPHY DOME
****

ITEM: 423
DATE:05/06/73

DISCIPLINE	E01 All-sky Camera (Aurora)
STATION LATITUDE	N 64.50
STATION LONGITUDE	E 211.45
ALTERNATE NAMES	
DATES OF OPERATION	09/1957 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	All-sky Camera, Aurora, one picture per minute taken during dark season.
RAW DATA	16 mm film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Preliminary editing for aurora
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Archives Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of Univ of Alaska chain of N-S meridian stations. Before 10/1974 station was located at Ester Dome (N64.88 E211.95).

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384

E01 All-sk

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NOVOLAZAREVSKAYA
****

ITEM: 880
DATE:00/00/75

DISCIPLINE ---------- E01 All-sky Camera
STATION LATITUDE ---------- S 70.80
STATION LONGITUDE ---------- E 11.80
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 04/1965 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------- All-sky Camera
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. G. V. Starkov
Polar Geophysical Institute
Academy of Sciences of the USSR
Apatity Murmansk Region
USSR 184200

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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ITEM: 470

l-sky Camera (Cont.)

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PORT AUX FRANCAIS
****

ITEM: 307
DATE: 02/06/75

DISCIPLINE	E01 All-sky Camera (Aurora)
STATION LATITUDE	S 49.35
STATION LONGITUDE	E 70.22
ALTERNATE NAMES	Kerguelen
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Aurora and airglow equipment, regular operatio under cloudless and moonlight conditions, mult color photometer.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	G. Weill Institut dAstrophysique 98 bis Bd Arago Paris France 750 1h
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 18 months.

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SACHS HARBOR

ITEM: 496

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POKER FLAT

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ITEM: 470

DATE:12/02/76

DISCIPLINE	E01 All-Sky Camera (Aurora)
STATION LATITUDE	N 64.80
STATION LONGITUDE	E 212.37
ALTERNATE NAMES	
DATES OF OPERATION	01/1976 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	All-Sky Camera, 16mm and 35mm. 16mm will operate routinely every night (one 8 sec exposure/min) and 35mm operates during rocket launches, certain satellite passes and for other special events.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Copy film
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Neal Brown Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA	Buzz Young Geophysical Institute - Archives University of Alaska Fairbanks AK USA 99701
ADDITIONAL COMMENTS	16mm has moved from Chatanika Radar Site to new optical observatory at Poker Flat. Special purpose data usually available after 1 month.

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SACHS HARBOR

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ITEM: 496
DATE:10/06/75

DISCIPLINE	E01 All-Sky Camera (Aurora)
STATION LATITUDE	N 72.00
STATION LONGITUDE	E 235.00
ALTERNATE NAMES	
DATES OF OPERATION	10/1969 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	All-Sky Camera, 1 picture every minute
RAW DATA	16mm film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Film, photo prints, preliminary editing for Aurora
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Archives Geophysical Institute University of Alaska Fairbanks AK USA 9701
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Seasonal operation each year during dark conditions.

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385

E01 All-sky

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SANAE
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ITEM: 781
DATE: 00/00/75

DISCIPLINE	E01 All-sky Camera
STATION LATITUDE	S 70.30
STATION LONGITUDE	E 357.65
ALTERNATE NAMES	
DATES OF OPERATION	01/1960 to present
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	All-sky Camera
RAW DATA	35 mm cinematographic film
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	35 mm cinematographic film
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Gideon J. Kuhn Hermanus Magnetic Obs, AGAP P.O. Box 32 Hermanus Rep of So Africa
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data not directly available because station is visited only once yearly.

ll-sky Camera (Cont.)

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SIPLE
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ITEM: 556
DATE:10/06/75

DISCIPLINE ----------	E01 All-Sky Camera (Aurora)
STATION LATITUDE ----------	S 76.00
STATION LONGITUDE ----------	E 276.00
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	04/1975 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	All-Sky Camera, 16mm, monitors Aurora. During dark season, 1 picture per minute is taken on 16mm film.
RAW DATA ----------	16mm film
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Preliminary editing for Aurora
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Archives Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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ITEM: 570

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SASKATOON

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ITEM: 542
DATE:10/06/75

DISCIPLINE	E01 All-Sky Camera (Aurora)
STATION LATITUDE	N 52.21
STATION LONGITUDE	E 252.81
ALTERNATE NAMES	Park Observation Site
DATES OF OPERATION	06/1957 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	All-Sky Camera (Auroral). 16mm All-Sky Camera built to study the formation of auroral features, movement and changes over periods of hours, extension of arcs and curtains past line of site of observing position
RAW DATA	16mm film
DATA REDUCTION PRACTICE	None
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	16mm film
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. D. J. McEwen Institute of Space & Atmospheric Studi University of Saskatchewan Saskatoon Saskatchewan Canada S7N OWO
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The All-Sky Camera was situated at a site called Site #5 52.16N, 106.60W from 1957 to 1965, then moved to its present location.

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SOUTH POLE
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ITEM: 570
DATE:05/06/75

DISCIPLINE ---------- E01 All-Sky Camera (Aurora)
STATION LATITUDE ---------- S 90.00
STATION LONGITUDE ---------- E 0.
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- All-Sky Camera. Aurora - during dark season, 1 picture per minute is taken on 35mm film.
RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ---------- None
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Archives
Geophysical Institute
University of Alaska
Fairbanks AK
USA 99701

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ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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386

E01 All-sky Camera (Cont.)

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TERRE ADELIE
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ITEM: 604
DATE:02/06/75

DISCIPLINE ---------- E01 All-sky Camera (Aurora)
STATION LATITUDE ---------- S 66.67
STATION LONGITUDE ---------- E 140.00
ALTERNATE NAMES ---------- Dumont dUrville
DATES OF OPERATION ---------- 01/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Aurora & airglow equipment, photometers, all-sky camera. Regular observations under cloudless and moonlight conditions.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 18 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- G. Weill
Institut dAstrophysique
98 Bis Bd Arago
Paris
France 75014

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 18 months.

386

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ITEM: 881

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VOSTOK

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ITEM: 881
DATE:00/00/75

DISCIPLINE ---------- E01 All-sky Camera
STATION LATITUDE ---------- S 78.40
STATION LONGITUDE ---------- E 106.90
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 05/1958 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------- All-sky Camera
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. G. V. Starkov
Polar Geophysical Institute
Academy of Sciences of the USSR
Apatity Murmansk Region
USSR 184200

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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E02 Visu

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CAMPBELL ISLAND
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ITEM: 83
DATE:05/03/75

DISCIPLINE ---------- E02 Visual Observations (Aurora)
STATION LATITUDE ---------- S 52.55
STATION LONGITUDE ---------- E 169.15
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 10/1974 to present
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ----- Visual observations, depending on cloud cover and auroral activity, visual observations taken at roughly 5 min intervals in support of all-sky camera programs.

RAW DATA ---------- Tables
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 6 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. I. L. Thomas
P.E.L. Auroral Station
DSIR
Omakau Central Otago
New Zealand

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

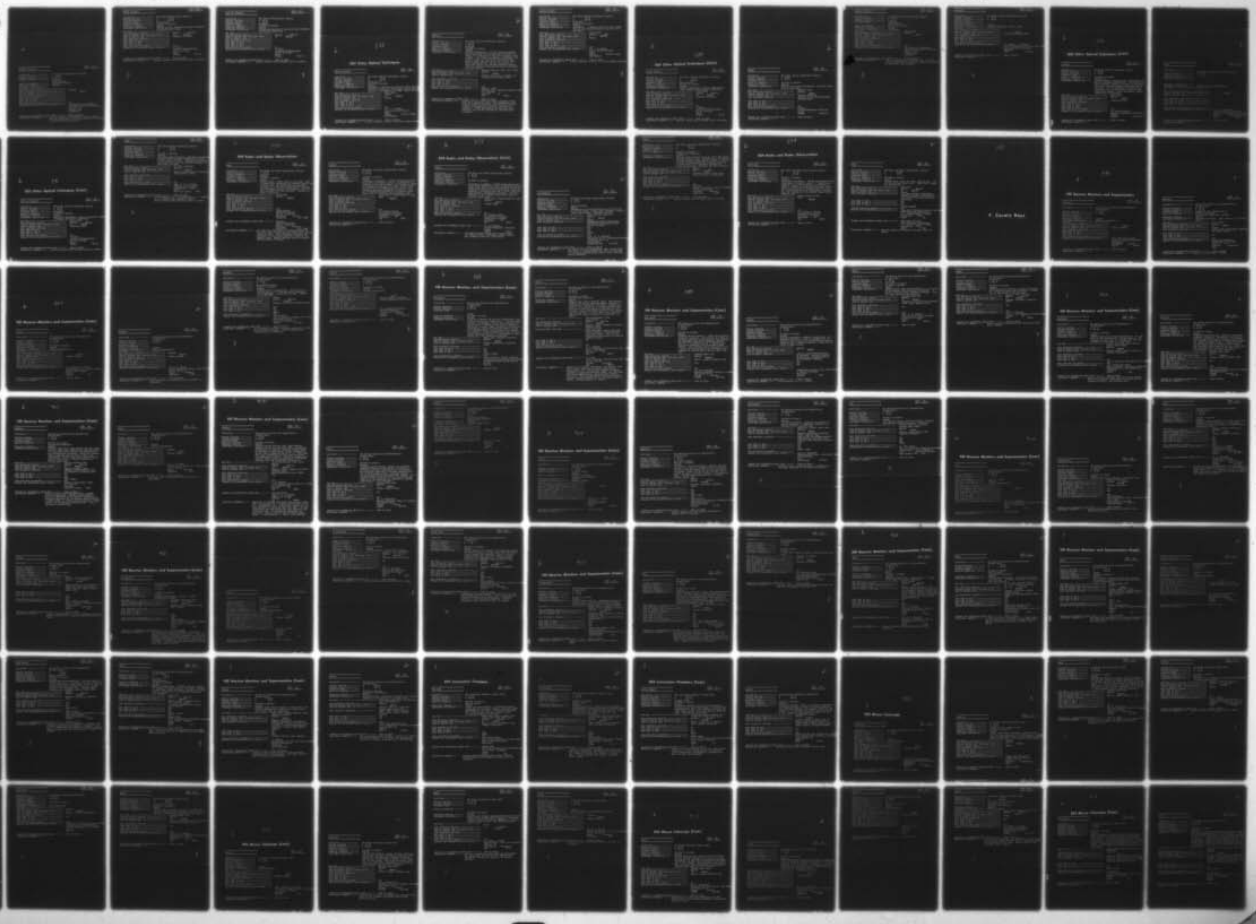
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ITEM: 1055

AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

UNCLASSIFIED AFGL-TR-77-0255 NL

12 OF 13
AD
A055 001



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GENERAL BELGRANO
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ITEM: 913
DATE:02/06/75

DISCIPLINE ---------- E02 Visual Observations (Aurora)
STATION LATITUDE ---------- S 77.97
STATION LONGITUDE ---------- E 321.20
ALTERNATE NAMES ---------- Belgrano
Gral Belgrano
DATES OF OPERATION ---------- 06/1962 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Horacio A. Cazeneuve
Instituto Antartico Argentino
Cerrito 1248
Buenos Aires
Argentina

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Special purpose data available after 4 months.
Data are published by Instituto Antartico Argentino
as scientific contributions.

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DUMONT dURVILLE
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ITEM: 1055
DATE:02/06/75

DISCIPLINE ----------	E02 Visual Observations (Aurora)
STATION LATITUDE ----------	S 66.67
STATION LONGITUDE ----------	E 140.00
ALTERNATE NAMES ----------	Terre Adelie
DATES OF OPERATION ----------	01/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Auroral regular observations under cloudless and moonlit conditions.
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	18 MONTHS
FORM OF REDUCED DATA ----------	Computer printouts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	G. Weill Institut dAstrophysique 98 bis Bd Arago Paris France 750 14
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available after 18 months.

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PORT AUX FRANCAIS
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ITEM: 967
DATE: 02/06/75

DISCIPLINE ---------- E02 Visual Observations (Aurora)
STATION LATITUDE ---------- S 49.35
STATION LONGITUDE ---------- E 70.22
ALTERNATE NAMES ---------- Kerguelen
DATES OF OPERATION ---------- 07/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Visual observations of aurora during cloudless and moonlit conditions.
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 18 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- G. Weill
Institut dAstrophysique
98 bis Bd Arago
Paris
France 750 14

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 18 months.

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388

E03 Other Optical Techniques

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ARRIVAL HEIGHTS
****

ITEM: 546
DATE:13/03/75

DISCIPLINE	E03 Other Optical Techniques (Aurora)
STATION LATITUDE	S 77.83
STATION LONGITUDE	E 166.65
ALTERNATE NAMES	Scott Base
DATES OF OPERATION	03/1976 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Photometer, scanning in elevation along invaria meridian, operates 8 hours/night during Moon Da Period. 7 1/2 degrees for 6704A, 4861A and 5876
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. I. L. Thomas P.E.L. Auroral Station DSIR Omakau Central Otago New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station operates as part of Arrival Heights progr

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BATTELLE
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ITEM: 489
DATE:07/04/75 1c

DISCIPLINE ---------- E03 Other Optical Techniques (Aurora)
STATION LATITUDE ---------- N 46.40
STATION LONGITUDE ---------- E 240.40
ALTERNATE NAMES ---------- Richland
DATES OF OPERATION ---------- 01/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Auroral Photometers. All-Sky scanning photometers monitoring auroral emissions OI 5577A, OI 6300A, N2+ 4278A and Hb 4861 and background 5350 & 6080A. The observing program is scheduled each month to start at the end of the moons third quarter phase and ends at the end of the moons first quarter phase. During this period (2 weeks per month), the All-Sky scanning photometers are routinely operated during all cloudless-moonless nights.

RAW DATA ---------- Digital Magnetic tape, strip chart
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- All-sky gray scale, isophote and isoslope circle maps, lists

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- LeRoi L. Smith
Battelle Obs., Battelle Memorial Inst.
P.O. Box 999
Richland WA
USA 99352

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Intensities are listed for every 5 degrees of azimuth for 6 elevation scans. The photometers have 5 degree field of views and data recording is both digital (minicomputer) and analog (strip chart recorder). Three photometers are operated simultaneously and all-sky coverage is obtained every 5 minutes.

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ARRIVAL HEIGHTS
****

ITEM: 547
DATE:13/03/75

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DISCIPLINE	E03 Other Optical Techniques (Aurora)
STATION LATITUDE	S 77.83
STATION LONGITUDE	E 166.65
ALTERNATE NAMES	Scott Base
DATES OF OPERATION	03/1976 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Photometer. 15 degrees field of view, 4278A. Station will operate whenever sun is not in the field.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular , None
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. I. L. Thomas P.E.L. Auroral Station DSIR Omakau Central Otago New Zealand
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Station operates as part of Arrival Heights program.

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389

E03 Other Optical Techniques (Cont.)

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DUMONT dURVILLE
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ITEM: 1056
DATE:02/06/75

DISCIPLINE ---------- E03 Other Optical Techniques (Aurora)
STATION LATITUDE ---------- S 66.67
STATION LONGITUDE ---------- E 140.00
ALTERNATE NAMES ---------- Terre Adelie
DATES OF OPERATION ---------- 01/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Auroral Photometers, regular observations under cloudless and moonlit conditions.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 18 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- G. Weill
Institut dAstrophysique
98 bis Bd Arago
Paris
France 750 14

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 18 months.

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KIRUNA
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ITEM: 317
DATE:18/02/76

DISCIPLINE ---------- E03 Other Optical Techniques (Aurora)
STATION LATITUDE ---------- N 67.84
STATION LONGITUDE ---------- E 20.42
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1970 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Four channel auroral photometer, meridian sweep, digital recording.
RAW DATA ---------- Magnetic tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ---------- Catalog of data in KIRUNA GEOPHYSICAL DATA
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Library
Kiruna Geophysical Institute
Kiruna
Sweden S-981 01

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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GENERAL BELGRANO
****

ITEM: 914
DATE: 02/06/75

DISCIPLINE ---------- E03 Other Optical Techniques (Aurora)
STATION LATITUDE ---------- S 77.97
STATION LONGITUDE ---------- E 321.20
ALTERNATE NAMES ---------- Belgrano
Gral Belgrano
DATES OF OPERATION ---------- 06/1962 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Photometer
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Horacio A. Cazeneuve
Instituto Antartico Argentino
Cerrito 1248
Buenos Aires
Argentina

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 4 months.
Data are published by Instituto Antartico Argentino
as scientific contributions.

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LENINGRAD
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ITEM: 787
DATE: 00/00/75

DISCIPLINE ---------- E03 Other Optical Techniques (Aurora)
STATION LATITUDE ---------- N 59.95
STATION LONGITUDE ---------- E 30.70
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Auroral Photometer, 5577A, 6300A
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Microfilm tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Michail I. Pudovkin
Dept of Terrestrial Physics, Phys Inst
Leningrad State University
Leningrad
USSR 199 164

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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390

E03 Other Optical Techniques (Cont.)

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LYCKSELE
****

ITEM: 372
DATE: 08/07/75

DISCIPLINE	E03 Other Optical Techniques (Aurora)
STATION LATITUDE	N 64.62
STATION LONGITUDE	E 18.76
ALTERNATE NAMES	
DATES OF OPERATION	09/1968 to present
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Auroral Spectral emissions on 4 wavelengths, F4 Meridian scanning photometers, 1 min/each scan and wavelength; number of filters in operation and in the interval between recordings can be selected. It is planned that during IMS the instrument will be connected to digital data acquisition system. After processing, analog records can be presented.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Mr. Harald Derblom Uppsala Ionospheric Observatory Uppsala Sweden S-755 90 1
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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MIRNY
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ITEM: 882
DATE:00/00/75

DISCIPLINE ----------
E03 Other Optical Techniques (Aurora)
STATION LATITUDE ---------- S 66.60
STATION LONGITUDE ---------- E 93.00
ALTERNATE NAMES ----------
DATES OF OPERATION ----------

OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ------ Optical Auroral Spectrograph
RAW DATA ----------

DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. L. S. Yevlashin
Polar Geophysical Institute
Academy of Sciences of the USSR
Apatity Murmansk Region
USSR 184200

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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LYCKSELE
****

ITEM: 373
DATE:18/02/76

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DISCIPLINE ----------	E03 Other Optical Techniques (Aurora)
STATION LATITUDE ----------	N 64.62
STATION LONGITUDE ----------	E 18.67
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1970 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	4-channel photometers, one meridian sweep every 15 minutes.
RAW DATA ----------	Strip chart
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	1 MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	Ove Klang Ionospheric Observatory Box 100 Lycksele Sweden S-921 00
ADDRESS FOR INFORMATION ABOUT DATA ---------	Library Kiruna Geophysical Institute Kiruna Sweden S-981 01
ADDITIONAL COMMENTS -----	

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PARATUNKA

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ITEM: 788

DATE:00/00/75

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DISCIPLINE	E03 Other Optical Techniques (Aurora)
STATION LATITUDE	N 52.58
STATION LONGITUDE	E 158.14
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Auroral Photometer, 5577A, 6300A
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Microfilm, tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Michail I. Pudovkin Dept of Terrestrial Physics, Phys Ins Leningrad State University Leningrad USSR 199 164
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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E03 Other Optical Techniques (Cont.)

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PORT AUX FRANCAIS
****

ITEM: 968
DATE: 02/06/75

DISCIPLINE	E03 Other Optical Techniques (Aurora)
STATION LATITUDE	S 49.35
STATION LONGITUDE	E 70.22
ALTERNATE NAMES	Kerguelen
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Multicolor photometer, regular operations under cloudless and moonlit conditions.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	G. Weill Institut dAstrophysique 98 bis Bd Arago Paris France 750 14
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 18 months.

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SANAE

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ITEM: 1046
DATE:18/02/75

DISCIPLINE ----------	E03 Other Optical Techniques (Aurora)
STATION LATITUDE ----------	S 70.31
STATION LONGITUDE ----------	E 357.64
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1970 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Low Light Level TV System, high speed imaging o auroral 3914A emission, intensifier tube in closed circuit TV chain, continuous recordings at selected intervals on 1/2inch videotape in 50Hz, 625 line mode
RAW DATA ----------	1/2 inch videotape
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Auroral microstructure analysis, power spectra, film
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Prof. A. D. M. Walker Physics, Univ of Natal King George V Avenue Durban Rep of So Africa 4000
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Co-investigators Dr. M. Scourfield, Mr. M. Barker, Dr. A. Hughes (same address as above). Special purpose data available after 18 months.

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E04 Radio and Radar Observations

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CASEY
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ITEM: 94
DATE:06/06/75

DISCIPLINE ---------- E04 Radio and Radar Observations (Aurora)
STATION LATITUDE ---------- S 66.54
STATION LONGITUDE ---------- E 110.36
ALTERNATE NAMES ---------- REPSTAT
DATES OF OPERATION ---------- 12/1973 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Auroral Radar. Radar works at 42.6 MHz. Four 6 element yagi antennas were directed toward the Auroral pole. The output was continuously recorded on 35 mm film travelling at 8 inch/h. The instrument operates continuously, the film being renewed at 6 day intervals. Analsis is done in Australia.

RAW DATA ---------- 35 mm film
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Casey Station
Antarctic Division
568 St. Kilda Rd.
Melbourne Victria
Australia Vic. 3004

ADDRESS FOR INFORMATION ABOUT DATA -------- Director
Antarctic Division
568 St. Kilda Rd.
Melbourne Victoria
Australia Vic. 3004

ADDITIONAL COMMENTS ----- The radar was installed to establish whether reflections from the Auroral pole region could be obtained at Casey. This havig been achieved, the instrument is now being modified to operate as a doppler radar. Special purpose data are usually available after 18 months.

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COLLEGE
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ITEM: 122
DATE:05/06/75

DISCIPLINE ----------	E04 Radio and Radar Measurements (Aurora)
STATION LATITUDE ----------	N 64.87
STATION LONGITUDE ----------	E 212.18
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	12/1965 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Infrasonic Microphone. 10-100 second period subsound waves related to Aurora. A capacitor microphone array, whose inputs are filtered by 1000 ft lengths of pipe with very small radial holes and covering a 4 quadrant area of 35 sq km continuously monitors atmospheric pressure. Data are recorded continuously on 3/4 inch/min strip chart, and 1/4 inch/min direct magnetic tape.
RAW DATA ----------	Strip chart, analog magnetic tape
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Charles Wilson Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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E04 Radio and Radar Observations (Cont.)

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KIRUNA
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ITEM: 318
DATE:05/06/75

DISCIPLINE	E04 Radio and Radar Observations (Aurora)
STATION LATITUDE	N 67.83
STATION LONGITUDE	E 20.33
ALTERNATE NAMES	
DATES OF OPERATION	02/1974 to present
OBSERVING SCHEDULE	
INSTRUMENT DESCRIPTION	Infrasonic microphone, 10-100 second period subsound waves related to aurora--a capacitor microphone array whose inputs are filtered by 1000 ft. lengths of pipe with very small radial holes and covering a 4 quadrant area of 35 sq km, continuously monitors atmospheric pressure. Data are recorded on 3/4 inch/min strip chart and 1/4 inch/min direct tape.
RAW DATA	*Strip chart, analog magnetic tape*
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular data
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Charles Wilson Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA	Mr. Hans Vestin Kiruna Geophysical Institute Kiruna Sweden 98101
ADDITIONAL COMMENTS	Information about station and original data--Dr. Charles Wilson; information about reduced data (tabular form)--Mr. Hans Vestin.

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KUHLUNGSBORN

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ITEM: 984
DATE:11/08/75

DISCIPLINE	E04 Radio and Radar Observations (Aurora)
STATION LATITUDE	N 54.12
STATION LONGITUDE	E 11.77
ALTERNATE NAMES	
DATES OF OPERATION	1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Radiosets on various frequencies in the HF, MF, LF and VLF range, 33 MHz radar equipment, auroral radar observations, continuous records
RAW DATA	Paper records, some film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	0.5 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	GEOPHYSIKALISCHE BEOBACHTUNGS-ERGEBNISSE (Geophysical Data) monthly bulletin
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Dr. K. Sprenger Observatorium fur Ionospharenforschung Mitschurin Str. 4-6 Kuhlungsborn German Dem Rep DDR 2565
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The monthly bulletin Geophysical Data is available from Akad. d. Wissenschaften der DDR, Zentralinstitut fur solar-terrestrische Physik (HHI), DDR 1199 Berlin-Adlershof.

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ITEM: 1102

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MAWSON

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ITEM: 1102
DATE:06/06/75

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DISCIPLINE	E04 Radio and Radar Observations (Aurora)
STATION LATITUDE	S 67.61
STATION LONGITUDE	E 62.88
ALTERNATE NAMES	
DATES OF OPERATION	08/1973 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Auroral Radar consists of 10 kW, 42.1 MHz pulsed coherent scatter radar, aligned along 106 degrees T radial towards Davis (S68.35 E77.58). B scan display is photographically recorded operation is continuous for 4 four-week periods centered on midsummer, midwinter and the equinoxes.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular . None
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Graphical plots of echo type, range and time of occurrence
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Director Antarctic Division, Dept of Science 568 St. Kilda Road Melbourne Victoria Australia 3004
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 15 months.

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E04 Radio and Radar Observations

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SCOTT BASE
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ITEM: 548
DATE:10/06/75

DISCIPLINE ----------	E04 Radio and Radar Observations (Aurora)
STATION LATITUDE ----------	S 77.75
STATION LONGITUDE ----------	E 167.50
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1976 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Infrasonic microphone. 10-100 second period sub-sound waves related to aurora. A capacitor microphone array, whose inputs are filtered by 1000 ft. lengths of pipe with very small radial holes and covering a 3 quadrant area of 35 sq km, continuously monitors atmospheric pressure. Data are recorded on 1/4 inch per minute direct magnetic tape.
RAW DATA ----------	Analog magnetic tape
DATA REDUCTION PRACTICE ----------	None
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Charles R. Wilson Geophysical Institute University of Alaska Fairbanks AK USA 99701
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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SYOWA
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ITEM: 588
DATE:25/03/75

DISCIPLINE ---------- E04 Radio and Radar Observations (Aurora)
STATION LATITUDE ---------- S 69.00
STATION LONGITUDE ---------- E 39.35
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 03/1966 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Aurora radar, radio and radar observations. 50, 65, 80, 112 MHz every 5 min. 35mm film, 1 frame per observation.

RAW DATA ---------- 35mm film
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 18 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- JARE DATA REPORTS (IONOSPHERE), annually issued by National Science Museum (now Polar Research Institute)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
United Kingdom
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Syowa Base (Japanese Antarctic Res Exp
Radio Research Laboratories
2-1, Nukui-Kitamachi 4-chome
Koganei-shi Tokyo
Japan 184

ADDRESS FOR INFORMATION ABOUT DATA -------- Radio Wave Division
Radio Research Laboratories
2-1, Nukui-Kitamachi 4-chome
Koganei-shi Tokyo
Japan 184

ADDITIONAL COMMENTS ----- Special purpose data usually available after 15 months.

F. Cosmic Rays

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F01 Neutron Monitors and Supermonitors

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AHMEDABAD
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ITEM: 738
DATE:00/00/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 23.01
STATION LONGITUDE ---------- E 72.60
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Neutron Supermonitor
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. Ram Gopal Rastogi
Physical Research Laboratory
Navrangpura
Ahmedabad Gujarat
India 380009

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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ALMA-ATA
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ITEM: 11
DATE:09/12/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 43.25
STATION LONGITUDE ---------- E 76.92
ALTERNATE NAMES ---------- Cosmic Ray Lab, Kazakh State U
DATES OF OPERATION ---------- 07/1957 to present
Intermittent operation 1-4/1960
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- IGY Neutron Monitor. Data taken on a 15 minute basis.

RAW DATA ---------- Film, tables
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- COSMIC DATA (KOSMICHESKIE DANNIYE) Ed. NAUKA (Moscow)
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Cosmic Ray Laboratory
Kazakh State University
Kirov St., 136
Alma-Ata Kazakhstan
USSR

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Operation intermittent 1-4/1960.

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ALERT
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ITEM: 8
DATE:10/06/75

DISCIPLINE ---------- F01 Neutron Monitors and Super-Monitors (Cosmic Rays)
STATION LATITUDE ---------- N 82.50
STATION LONGITUDE ---------- E 297.67
ALTERNATE NAMES ----------
DATES OF OPERATION ---------
10/1965 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- 18-NM-64 Neutron Monitor cosmic ray nucleonic component intensity. The monitor is housed in a building specially constructed for the purpose. The equipment comprises an 18-NM-64 neutron monitor (three 6-counter units), a digital mercury servobarometer and an automatic data readout. The counting totals from each of the 3 units and the reading of the barometer are recorded on punched paper tape at 5 minute intervals.
RAW DATA ----------
Punched paper tape
DATA REDUCTION PRACTICE ---------- , Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, magnetic tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. M. Bercovitch
National Research Council of Canada
100 Sussex Drive
Ottawa Ontario
Canada K1A 0R6

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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APATITY
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ITEM: 21
DATE:01/12/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 67.50
STATION LONGITUDE	E 33.33
ALTERNATE NAMES	
DATES OF OPERATION	10/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IQSY-Neutron Monitor-64
RAW DATA	Tables, computer printouts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINEfY PUBLISHED	COSMIC DATA, NAUKA Publishing House, Moscow (KOSMYCHESKIYE DANNIYE), monthly review
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	L. L. Lazutin Polar Geophysical Institute Academy of Sciences of the USSR Apatity Murmansk Region USSR 184200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 1 month.

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F01 Neutron Monitors and Supermonitors (Cont.)

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ATHENS
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ITEM: 784
DATE: 00/00/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 37.96
STATION LONGITUDE	E 23.70
ALTERNATE NAMES	
DATES OF OPERATION	08/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Neutron supermonitor
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Mr. Xenophon D. Moussas Cosmic Ray Group, Univ of Athens 104, Solonos Street Athens Greece 144
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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BRISBANE

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ITEM: 712
DATE:00/00/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- S 27.53
STATION LONGITUDE ---------- E 152.92
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Neutron Supermonitor
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. A. G. Fenton
Hobart Cosmic Ray Res Gr, Dept of Phy
G.P.O. Box 252 C
Hobart Tasmania
Australia 7001

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------ Short term data for selected events available in retrospect.

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BAGNERES

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ITEM: 42
DATE:02/12/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 43.08
STATION LONGITUDE	E .15
ALTERNATE NAMES	Bagneres-De-Bigorre
DATES OF OPERATION	01/1971 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	3-NM-64 Neutron Supermonitor. The data are recorded every 1/4 h. Average hourly counting rate 1400x10E02. Scaling factor 100. 2-NM-64 in use 1-4/1971.
RAW DATA	Tables
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Computer printouts, graphical plot
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes WDC-Cl
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Jean Folques Lab de Physique Cosmique du C.N.R.S. Route des Gatines Verrieres-le-Buisson France 91 370
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	The atmospheric pressure is hourly measured on 1/10 mm Hg (Analog recorder). Special purpose data available after 3-4 months.

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CALGARY
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ITEM: 790
DATE:00/00/75

DISCIPLINE ----------	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ----------	N 51.08
STATION LONGITUDE ----------	E 245.90
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	01/1964 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Neutron supermonitor
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter, bulletins
DATA ROUTINELY PUBLISHED ----------	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. Doraswamy Venkatesan Physics Department University of Calgary Calgary Alberta Canada T2N 1N4
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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398

F01 Neutron Monitors and Supermonitors (Cont.)

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CHACALTAYA
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ITEM: 102
DATE:10/11/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	S 16.35
STATION LONGITUDE	E 291.87
ALTERNATE NAMES	La Paz
DATES OF OPERATION	10/1966 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	2-section standard IGY neutron supermonitor, continuous counting of cosmic rays. 12 proportional counters, 6.84x10E06 counts/h max. counting rate: values every 5 minutes. Mean station pressure 504 mm Hg, altitude 3400m, barometric coefficient -0.96/mm Hg, scaling of observed counts by 100 done electronically, data corrected for temperature effects. Normal integrating period 15 min, normal reporting period 1 h. Flare mode of observation has 1 min integrating periods.
RAW DATA	Paper tape, computer printouts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Computer printouts, graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Tokyo; Canada
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Carlos Aguirre, (Prof.) Director Instituto de Investigaciones Fisicas Universidad Mayor de San Andres La Paz Bolivia
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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CLIMAX
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ITEM: 117
DATE:14/11/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 39.37
STATION LONGITUDE ---------- E 253.82
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1950 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Simpson type neutron monitor (IGY). Mean station pressure 518 mm Hg, altitude 3400 m, barometric coefficient -0.96/mm Hg. 2-section standard IGY station, each section 12 BF cubed counting tubes. Scaling of observed counts by 100 done by electronics, normal integrating period 15 min, normal reporting period 1 h, flare mode 1-min integrating periods, data corrected for temperature effects.

RAW DATA ---------- 16mm photographic film, strip charts
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1.5 MONTHS
FORM OF REDUCED DATA ---------- Magnetic tapes, computer printouts computer plots
DATA ROUTINELY PUBLISHED ---------- observed counts
Daily averages, hourly plots published monthly in SOLAR-GEOPHYSICAL DATA (NOAA). All data are temperature and pressure corrected observed counts
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- J. A. Simpson
Univ of Chicago, Enrico Fermi Inst, LAS
933 E. 56th Street
Chicago IL
USA 60637

ADDRESS FOR INFORMATION ABOUT DATA -------- A. Lukey
Univ of Chicago, Enrico Fermi Inst, LAS
933 E. 56th St.
Chicago Illinois
USA 60637

ADDITIONAL COMMENTS ----- Operation is normally continuous with nominal (less than 1 month) gaps due to station malfunction, maintenance, etc. Significant changes in station hardware or operation have been made. All published data are normalized over resulting data discontinuities. These normalization data are available. Special purpose observations are available after 0.5 months. Co-investigator: S. Tejero.

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F01 Neutron Monitors and Supermonitors (Cont.)

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DEEP RIVER
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ITEM: 145
DATE:16/06/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 46.10
STATION LONGITUDE	E 282.50
ALTERNATE NAMES	
DATES OF OPERATION	04/1962 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	48-NM-64 Neutron Monitor. Cosmic Ray Nucleonic Component Intensity. The monitor is housed in a building specially constructed for the purpose. The equipment comprises a 48-NM-64 neutron monitor (3 16-counter units), a digital mercury servo barometer and an automatic data readout. The counting totals from each of the 3 units and the reading of the barometer are recorded on punched paper tape at 5 min intervals.
RAW DATA	Punched paper tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables, graphs, magnetic tape
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. M. Bercovitch National Research Council of Canada 100 Sussex Drive Ottawa Ontario Canada K1A OR6
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

ITEM: 147

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DOURBES
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ITEM: 153
DATE:02/02/76

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 50.10
STATION LONGITUDE ---------- E 4.60
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Neutron Supermonitor 9-NM-64, divided into 3 independent sections - counts recorded every 15 minutes with the value of the barometric pressure measured with a digital barometer - numerical records on paper strips.
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ---------- Institut Royal Meteorologique de Belgique - Bulletin mensuel, observations ionospheriques et du rayonnement cosmique
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION -----

Geophysique externe, Inst Royal Meteor
3, Avenue Circulaire
Bruxelles
Belgium 1180

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Co-investigator Dr. J-C. Jodogne

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DENVER
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ITEM: 147
DATE:18/03/75

DISCIPLINE	FØ1 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 39.75
STATION LONGITUDE	E 255.00
ALTERNATE NAMES	University of Denver
DATES OF OPERATION	Ø1/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	3NM64; narrow angle vertical and N, S, E, W tilted telescopes; omnidirectional telescope. 15 minute counting rates; barometer pressure. Cosmic Rays (Nucleonic and Mesons)
RAW DATA	Punched paper tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Computer printouts and/or punched cards and/or magnetic tape
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. R. L. Chasson Dept of Physics and Astronomy University of Denver Denver CO USA 80210
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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DURHAM

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ITEM: 157

DATE:17/11/75

DISCIPLINE ----------	FØ1 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ----------	N 43.1Ø
STATION LONGITUDE ----------	E 289.17
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	Ø7/1964 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	18-NM-64 Neutron Monitor, automatic digitized data reduced 5 minute data averaging. Output for an IBM 36Ø-5Ø or DEC-1Ø format.
RAW DATA ----------	Magnetic tape, printout
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	12 MONTHS
FORM OF REDUCED DATA ----------	Computer printouts, graphical plots
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	John A. Lockwood Univ. of New Hampshire, Physics Dept. Durham NH USA Ø3824
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose observations are usually available after 3 months.

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F01 Neutron Monitors and Supermonitors (Cont.)

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FUKUSHIMA
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ITEM: 184
DATE:14/01/76

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 37.75
STATION LONGITUDE ---------- E 140.48
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 11/1971 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 3-NM-64 Cosmic Ray Neutron Supermonitor. The raw data are the counting rate for ten minutes. The average counting rate is 7.5x10E04 cph, and the barometric coefficient is - 0.64 %/mb.

RAW DATA ---------- Digital recording data, digital hourly value tables
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 6 MONTHS
FORM OF REDUCED DATA ---------- Monthly tables (hourly values) of computer printouts

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Inst of Physical and Chemical Res, Toky
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. Tsunekichi Kanno
Dept of Physics, Faculty of Education
Fukushima Univ, 12-23 Hamada-cho
Fukushima
Japan 860

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Data are digital recording data for 10 min, digital hourly value tables (uncorrected and corrected for barometric effect), and barometer data.

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GOOSE BAY
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ITEM: 210
DATE:16/06/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 53.27
STATION LONGITUDE ---------- E 299.60
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 11/1964 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 18-NM-64 Neutron Monitor, cosmic ray nucleonic component intensity. The monitor is housed in a building specially constructed for the purpose. The equipment comprises an 18-NM-64 neutron monitor (three 6-counter units), a digital mercury servobarometer and an automatic data readout. The counting totals from each of the 3 units and the reading of the barometer are recorded on punched paper tape at 5 min intervals.

RAW DATA ---------- Punched paper tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, graphs, magnetic tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. M. Bercovitch
National Research Council of Canada
100 Sussex Drive
Ottawa Ontario
Canada K1A 0R6

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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GENERAL BELGRANO
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ITEM: 915
DATE: 02/06/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	S 77.97
STATION LONGITUDE	E 321.20
ALTERNATE NAMES	Belgrano Gral Belgrano
DATES OF OPERATION	06/1962 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	
RAW DATA	
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Horacio A. Cazeneuve Instituto Antartico Argentino Cerrito 1248 Buenos Aires Argentina
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 4 months. Data are published by Instituto Antartico Argentino as scientific contributions.

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GULMARG

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ITEM: 221

DATE:02/12/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 34.07
STATION LONGITUDE	E 74.42
ALTERNATE NAMES	
DATES OF OPERATION	01/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Cosmic ray neutron monitor, 20 BF3 counters of length 3 feet. Counting rate 260 000/h.
RAW DATA	
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	H. Razdan HARL-NRL, Bhabha Atomic Res Center Nasim Bagh Srinagar Kashmir India
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Data available from 1969 onwards. Special purpose data usually available after 3 months.

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F01 Neutron Monitors and Supermonitors (Cont.)

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HERMANUS
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ITEM: 256
DATE:18/04/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- S 34.42
STATION LONGITUDE ---------- E 19.22
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1973 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 12-NM-64 Chalk River type neutron monitor (super monitor) comprising 3-NM-64 pile with additional 13 cm paraffin wax shielding and 9-NM-64 pile with conventional shielding. Observing schedule hourly counting rates of the 12 tubes, and (separately) 10 min mixed totals and multiplicities of the 9-NM-64. Digital recording on punched paper tape.

RAW DATA ---------- Digital magnetic tape
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Tables, magnetic tape
DATA ROUTINELY PUBLISHED ---------- HERMANUS NEUTRON MONITOR DATA, distributed on exchange basis
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Umea; Tokyo
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Magnetic Observatory (CSIR)
P.O. Box 32
Hermanus
Rep of So Africa 7200

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 3 months. Auxiliary equipment - EXACTEL servobarometer. Prior to commissioning of 12-NM-64, recording instruments used were an IGY pattern neutron monitor (5/1957-5/1964), a 3-NM-64 neutron monitor (9/1964-7/1972) and a 9-NM-64 (8/1972-12/1972). Gap in operation 6/1964-8/1964.

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HOBART

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ITEM: 713
DATE:00/00/75

DISCIPLINE ----------	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ----------	S 42.92
STATION LONGITUDE ----------	E 147.20
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Neutron Supermonitor
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. A. G. Fenton Hobart Cosmic Ray Res Gr, Dept of Phys G.P.O. Box 252 C Hobart Tasmania Australia 7001
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	Short term data for selected events available in retrospect.

1 402

F01 Neutron Monitors and Supermonitors (Cont.)

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HUANCAYO
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ITEM: 271
DATE:10/12/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- S 12.03
STATION LONGITUDE ---------- E 284.67
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1953 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Simpson Neutron Monitor (IGY), mean station pressure 518 mm Hg, altitude 3400 m, barometric coefficient -0.96/mm Hg, observed counts scaled by 100 done by electronics, normal integrating period 15min, reporting period is 1h, flare mode with 1min integrating periods, data corrected for temperature effects. 2-section standard IGY station, each section consisting of 12 BF-cubed counting tubes and associated electronics.

RAW DATA ---------- 16 mm photographic file, strip charts
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 1.5 MONTHS
FORM OF REDUCED DATA ---------- Magnetic tapes, computer printouts computer plots
DATA ROUTINELY PUBLISHED ---------- SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- J. A. Simpson
U of Chicago, Enrico Fermi Inst, LASR
933 E 56th Street
Chicago IL
USA 60637

ADDRESS FOR INFORMATION ABOUT DATA -------- Data Librarian
c/o Dr. J. A. Simpson
LASR, U of Chicago
Chicago IL
USA 60637

ADDITIONAL COMMENTS ----- Operation is normally continuous with nominal (less than 1 month)gaps due to station malfunction and repair, maintenance, etc. Significant changes in station hardware or operation have been made. All published data has been normalized over resulting data discontinuities. Normalization parameters are available. Special purpose data available after 1 month. Co-investigator: S. Tejero (same address).

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INUVIK
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ITEM: 281
DATE:16/06/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 68.35
STATION LONGITUDE ---------- E 226.28
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1964 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 18-NM-64 Neutron Monitor, cosmic ray nucleonic component intensity--The monitor is housed in a building specially constructed for the purpose. The equipment comprises an 18-NM-64 Neutron Monitor (3 six-counter units), a digital mercury servobarometer and an automatic data readout. The counting totals from each of the 3 units and the reading of the barometer are recorded on punched paper tape at 5 min intervals.

RAW DATA ---------- Punched paper tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables, magnetic tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. M. Bercovitch
National Research Council of Canada
100 Sussex Drive
Ottawa Ontario
Canada K1A 0R6

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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IRKUTSK
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ITEM: 872
DATE:00/00/75

DISCIPLINE ----------	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ----------	N 52.47
STATION LONGITUDE ----------	E 104.03
ALTERNATE NAMES ----------	Zui
DATES OF OPERATION ----------	12/1957 to present Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Neutron supermonitor
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. A. A. Luzov SibIZMIR P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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1 403

F01 Neutron Monitors and Supermonitors (Cont.)

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IZMIRAN
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ITEM: 853
DATE:00/00/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 55.47
STATION LONGITUDE ---------- E 37.32
ALTERNATE NAMES ---------- Krasnaya Pakhra
Moscow
DATES OF OPERATION ---------- 07/1957 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Neutron Monitor
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Prof. L. I. Dorman
IZMIRAN
P/O Akademgorodok
Moscow
USSR 149092

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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KERGUELEN
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ITEM: 308
DATE:15/05/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	S 49.35
STATION LONGITUDE	E 70.25
ALTERNATE NAMES	Port aux Francais
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IGY monitor (07/1957-01/1964), 18-NM-64 (02/1964-present); the data are recorded every 5 minutes. We only print the hourly data in our routine publications. There is also an aid-recorder with a period of about 3 minutes, linked to the counting rate. Average hourly counting rate 1900x400. Scaling factor 400.
RAW DATA	Tables
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Computer printouts, graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Umea; Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Jean Folques *Laboratoire de Physique Cosmique du CNR* Route des Gatines Verrieres-le-Bu France 91 370
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data are usually available on request after 3-4 months.

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ITEM: 309

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JUNGFRAUJOCH

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ITEM: 289

DATE:18/04/75

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DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 46.55
STATION LONGITUDE	E 7.98
ALTERNATE NAMES	
DATES OF OPERATION	10/1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IGY Neutron Monitor, intensity variations of cosmic radiation -- Apparatus consists of 3 sections with 6 counters each.
RAW DATA	Typewriter output, paper tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Computer printouts, graphical plots, magnetic tape
DATA ROUTINELY PUBLISHED	DATA OF THE IGY NEUTRON MONITOR JUNGFRAUJOCH, Physikalisches Institut, Univ of Berne, Switzerland
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Tokyo, Japan
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. H. Debrunner Physikalisches Inst., Universitat Ber Sidlerstrasse 5 Bern Switzerland CH-3012
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Altitude 3550 m; Collected data of 6 months are routinely published in the books cited above.

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KIEL

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ITEM: 309

DATE:24/02/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 54.30
STATION LONGITUDE	E 10.10
ALTERNATE NAMES	
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IGY neutron monitor (07/1957-12/1964), 18-NM-64 supermonitor (09/1964-present), modulation.
RAW DATA	Counter printouts, tables, punched paper tapes
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	.5 *MONTHS*
FORM OF REDUCED DATA	Tables, punched paper tapes, computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Tokyo
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Otto Binder Inst fur Reine und Angewandte Kernphysi Olshausenstr. 40-60, Gebaude 32 Kiel Schleswig-Holstein West Germany FRG D-23
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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404

F01 Neutron Monitors and Supermonitors (Cont.)

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KIEV
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ITEM: 851
DATE:00/00/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 50.72
STATION LONGITUDE ---------- E 30.30
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1968 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Neutron supermonitors
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER -------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------- Dr. A. K. Yukhimuk
Inst of Geophysics, Ukranian Acad of S
32, Polladin Avenue
Kiev
USSR 68

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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LOMNICKY STIT

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ITEM: 355
DATE:29/03/76

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 49.20
STATION LONGITUDE ---------- E 20.22
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1971 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 4-NM-64 IQSY Neutron Monitor, Carmichael type
RAW DATA ---------- Computer printouts
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 6 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Jozef Ilencik
Inst Experimental Phys, Cosmic Ray Lab
Vila Flora
Stary Smokovec Slovakia
Czechoslovakia 062 01

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose observations are usually available after 1 month.

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ITEM: 714

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LEEDS
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ITEM: 336
DATE:17/03/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 53.82
STATION LONGITUDE ---------- E 358.40
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 08/1954 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 18-NM-64 Neutron Monitor, SF 1:100, basic time interval 5 min, 3 sections. During solar flares the recording interval is automatically reduced to 1 min.

RAW DATA ---------- Tables (computer printouts)
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Tables (computer printouts)
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Tokyo
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Prof. P. L. Marsden
University of Leeds
Department of Physics
Leeds West Yorkshire
England LS2 9JT

ADDRESS FOR INFORMATION ABOUT DATA -------- Dr. P. Chaloupka
University of Leeds
Department of Physics
Leeds West Yorkshire
England LS2 9JT

ADDITIONAL COMMENTS ----- During the period of operation, the instruments have been changed several times. 18-NM-64 working since 1965. Dr. C. J. Hatton of the University of Leeds can also be contacted for information about the station and the data.

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MAWSON

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ITEM: 714

DATE:00/00/75

DISCIPLINE ----------	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ----------	S 67.60
STATION LONGITUDE ----------	E 62.80
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Neutron Supermonitor
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	Special
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -------	Dr. A. G. Fenton Hobart Cosmic Ray Res Gr, Dept of Phys G.P.O. Box 252 C Hobart Tasmania Australia 7001
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	Short term data for selected events available in retrospect.

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F01 Neutron Monitors and Supermonitors (Cont.)

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MEXICO
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ITEM: 402
DATE: 05/11/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 19.33
STATION LONGITUDE ---------- E 260.82
ALTERNATE NAMES ---------- C.U. (Ciudad Universitaria)

Mexico City
DATES OF OPERATION ---------- 06/1975 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ IGY Neutron Monitor, 6-NM-64 Supermonitor, Meson Telescope. The IGY Neutron Monitor is a modified IGY design (not standard). The number of counters in monitor is 6.

RAW DATA ---------- Paper tape, computer printout
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------- 3 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Javier A. Otaola
Instituto de Geofisica
Ciudad Universitaria
Mexico D.F.
Mexico 20

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------ Due to local conditions, all detectors have been out of operation since December, 1974. Restarting operation planned for June 1976. Special purpose data usually available after 1 month.

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MORIOKA

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ITEM: 407

DATE·26/01/76

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DISCIPLINE ----------	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ----------	N 39.70
STATION LONGITUDE ----------	E 141.13
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	08/1970 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	IGY Neutron Monitor
RAW DATA ----------	Tables, computer printouts
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER -------	12 MONTHS
FORM OF REDUCED DATA ----------	
DATA ROUTINELY PUBLISHED ----------	Annual Report of the Faculty of Education, The University of Iwate, Morioka, Japan; Tables; once a year.
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Yes Tokyo
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. Hachiro Takahashi Dept of Physics, Iwate University 18-33, Ueda-3 Morioka Iwate-ken Japan 020
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	Neutron Supermonitor is to be in operation in 1977. Special purpose data is usually available after 2-3 months.

1 406

F01 Neutron Monitors and Supermonitors (Cont.)

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MT NORIKURA
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ITEM: 415
DATE:12/12/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 36.11
STATION LONGITUDE	E 137.55
ALTERNATE NAMES	
DATES OF OPERATION	11/1956 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Neutron supermonitor, 4-NM-64, 3 tubes (9/68-9/70), (9/75-)
RAW DATA	Printout counts per hour
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Magnetic tape, computer printouts, copies
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Japan
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Masami Wada The Inst of Phys & Chem Research 7-13, Kaga-1, Itabashi Tokyo Japan 173
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Continuation of IGY type monitor: 11/56-8/68, use of Neutron supermonitor from 9/68. Since the pressure readings are much influenced by wind, the pressure correction is preliminary. After final correction is completed, the reduced data will be published. Special purpose data usually available next day, except holiday.

406

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NORILSK

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ITEM: 374
DATE:00/00/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 69.00
STATION LONGITUDE ---------- E 88.00
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1971 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Neutron Supermonitor
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------- Dr. A. A. Luzov
SibIZMIR
P.O.B. 4
Irkutsk
USSR 33

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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MT WASHINGTON

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ITEM: 418

DATE:17/03/75

DISCIPLINE ----------	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ----------	N 44.30
STATION LONGITUDE ----------	E 288.70
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	1953 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Neutron monitor - 12 tube IGY Monitor.
RAW DATA ----------	Magnetic tape, IBM cards
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER -------	12 MONTHS
FORM OF REDUCED DATA ----------	Magnetic tape, IBM cards
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION ------	John A. Lockwood Univ of New Hampshire Physics Department Durham NH USA 03824
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	Special purpose data available after 1 month.

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PIC DU MIDI
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ITEM: 461
DATE:15/05/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 42.93
STATION LONGITUDE	E .25
ALTERNATE NAMES	
DATES OF OPERATION	08/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	9NM-64 Neutron Supermonitor, the data are recorded every 1/4 hour. We only print the hourly data in our routine publications. There is also an aid-recorder with a period of about 3 minutes, linked to the counting rate. Average hourly counting rate 2500x10E3, scaling factor 1000.
RAW DATA	Tables
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Computer printouts, graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes Umea; Tokyo
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Jean Folques Laboratoire de Physique Cosmique du CNR Route des Gatines Verrieres-le- Buisson France 91370
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Atmospheric pressure measured on 1/10 mm Hg and the same schedule as the monitor. Special purpose data usually available after 3-4 months. Instruments used were: IGY type 08/1957-09/1964; 3-NM-64 07/1964-10/1964; 9-NM-64 11/1964 to present.

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407

F01 Neutron Monitors and Supermonitors (Cont.)

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POTCHEFSTROOM

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ITEM: 473

DATE:25/06/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	S 26.66
STATION LONGITUDE	E 27.08
ALTERNATE NAMES	
DATES OF OPERATION	05/1971 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	15 IGY neutron monitor - Standard IGY neutron monitor with 15 of 107 EB70/50 20th Century Electronics neutron tubes, 10 minute printout.
RAW DATA	Paper punch, digital printout, magnetic tape, computer printout
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Magnetic tape, computer printout, graphical plot
DATA ROUTINELY PUBLISHED	Cosmic ray neutron monitor data, Potchefstroom
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Cosmic Ray Research Unit Dept of Physics Potchefstroom University for CHE Potchefstroom South Africa 2520
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data usually available after 1 month.

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REWA

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ITEM: 488

DATE:07/04/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)

STATION LATITUDE ---------- N 24.32

STATION LONGITUDE ---------- E 81.17

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 07/1975 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ------ Super Neutron Monitor, Cosmic Rays neutron intensity: The Super Neutron Monitor consists of 18 large size BF3 proportional counters arranged in the form of 3 separate piles. The pulses produced by an interacting cosmic ray nucleon is automatically counted and recorded on punch paper tape and typewriter every 4 minutes.

RAW DATA ---------- Paper tape, computer printout

DATA REDUCTION PRACTICE ---------- Regular

REGULAR REDUCED DATA AVAILABLE AFTER ------- 3 MONTHS

FORM OF REDUCED DATA ---------- Computer printouts

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ---------- Yes

DATA SENT TO WDC-B ---------- Yes

DATA SENT TO WDC-C ---------- Yes

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Sant Prasad Agrawal
Govt. Sci. College Rewa (M.P.)
Rewa Madhya Pradesh
India 486001

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS ------ The Super Neutron Monitor has been in continuous operation at PRL Ahmedabad since July 1968. It has now been given to APS - University Rewa and is expected to be installed at Rewa before the end of 1975. Observations were planned to start from July 1975 or latest by the end of this year.

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PREDIGTSTUHL

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ITEM: 475

DATE:13/03/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)

STATION LATITUDE ---------- N 47.70

STATION LONGITUDE ---------- E 12.88

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 1964 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ------ NM 3-64 Super Neutron Monitor recording slow neutrons.

RAW DATA ---------- Computer printouts

DATA REDUCTION PRACTICE ---------- Regular

REGULAR REDUCED DATA AVAILABLE AFTER ------- 2 MONTHS

FORM OF REDUCED DATA ---------- Computer printouts

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Reinhold Reiter
Inst for Atmos Environmental Research
Kreuzeckbahnstrasse 19
Garmisch-Partenkichen
Bavaria FRG D-8100

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above

ADDITIONAL COMMENTS ------ Data are sent to Fernmeldetechnisches Zentralamt der Deutschen Bundespost, Darmstadt, FRG.

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F01 Neutron Monitors and Supermonitors (Cont.)

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ROMA
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ITEM: 492
DATE:24/10/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 41.90
STATION LONGITUDE	E 12.52
ALTERNATE NAMES	Svirco Rome
DATES OF OPERATION	05/1966 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Neutron Monitor NM-64. Cosmic rays. 9 tubes NM-64 type, continuous operation.
RAW DATA	Film, tables
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Tables, cards, magnetic tape
DATA ROUTINELY PUBLISHED	Hourly corrected neutron intensity, pressure, plots in COSMIC RAY NM-64 NEUTRON MONITOR DATA, Rome, Italy, Lab de Ricerca e Tecnologia per lo studio del plasma nello spazio-CRN-Roma
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. G. Villoresi Istituto di Fisica G. Marconi Piazzale delle Scienze 5 Roma Italy 00185
ADDRESS FOR INFORMATION ABOUT DATA	Dr. N. L. Zangrilli Istituto di Fisica G. Marconi Piazzale delle Scienze 5 Roma Italy 00185
ADDITIONAL COMMENTS	Special purpose data usually available after 4 months.

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SANAE

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ITEM: 531
DATE:25/06/75

DISCIPLINE ----------	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ----------	S 70.31
STATION LONGITUDE ----------	E 357.64
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	02/1964 to present Station moved Intermittent operation
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	3-NM-64 Neutron Monitor. Standard super neutron monitor. 10 minute recording of counting rate and pressure.
RAW DATA ----------	Punch tape, digital printout, mag tape, computer printout
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Computer printouts, graphs, magnetic tape
DATA ROUTINELY PUBLISHED ----------	COSMIC RAY NEUTRON MONITOR DATA, SANAE
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	Yes
DATA SENT TO WDC-C ----------	Yes
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Cosmic Ray Research Unit Department of Physics Potchefstroom University for CHE Potchefstroom South Africa 2520
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	No data available from 04/02/71 to 17/03/71 when station was moved a distance of about 500 meters. Special purpose data usually available after 1 month.

F01 Neutron Monitors and Supermonitors (Cont.)

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SEOUL
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ITEM: 551
DATE:13/03/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 37.32
STATION LONGITUDE	E 126.56
ALTERNATE NAMES	Sogang
DATES OF OPERATION	11/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Super Neutron counters (IQSY type); 10 minute pressure, uncorrected and corrected data; Routine observation.
RAW DATA	Printed paper tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	Monthly tables, graphical plots distributed by requests every three months.
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Tokyo, Umea
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Byung-So Pak Dept. of Physics, Sogang University Mapo-ku Seoul Korea 121
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Encourage data exchange with the monitoring data of the interplanetary space, e.g. magnetic fields and solar wind.

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SULPHUR MOUNTAIN
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ITEM: 789
DATE:00/00/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 51.20
STATION LONGITUDE	E 244.39
ALTERNATE NAMES	
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Neutron supermonitor
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter, bulletins
DATA ROUTINELY PUBLISHED	SOLAR-GEOPHYSICAL DATA (NOAA)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Doraswamy Venkatesan Physics Department University of Calgary Calgary Alberta Canada T2N 1N4
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

F01 Neutron Monitors and Supermonitors (Cont.)

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TASHKENT
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ITEM: 594
DATE:22/04/76

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 41.33
STATION LONGITUDE	E 69.61
ALTERNATE NAMES	
DATES OF OPERATION	01/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	IQSY Neutron Monitor: cubical muon telescope.
RAW DATA	Tables, paper tape
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	Cosmic data, monthly review Nauka, Moscow
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Tashkent Inst of Seismology Acad of Sci USSR Hurshida 3 Tashkent USSR 700128
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ITEM: 605

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TIXIE BAY

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ITEM: 843
DATE:00/00/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- N 71.60
STATION LONGITUDE ---------- E 129.00
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 08/1966 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Neutron supermonitor
RAW DATA ---------- Tabular matter
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. N. P. Chirkov
Inst of Cosmophysical Res and Aeronom
Lenin Avenue 61
Yakutsk
USSR

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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TOKYO

ITEM: 612
DATE:12/12/75

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TERRE ADELIE

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ITEM: 605
DATE:15/05/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE ---------- S 66.67
STATION LONGITUDE ---------- E 140.02
ALTERNATE NAMES ---------- Dumont dUrville
DATES OF OPERATION ---------- 10/1967 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 9-NM-64 Neutron supermonitor. The data are recorded every 1/4 h. We only print the hourly data in our routine publications. There is also an aid-recorder with a period of about 3 minutes, linked to the counting rate. Average hourly counting rate 2100x200, scaling factor 200.

RAW DATA ---------- Tables
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts, graphical plots

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ---------- Yes
DATA SENT TO WDC-C ---------- Yes
Umea, Tokyo
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Jean Folques
Lab. de Physique Cosmique du C.N.R.S
Route des Gatines
Verrieres-le-Buisson
France 91370

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Atmospheric pressure is measured on 1/10 mm Hg and the same schedule as the monitor. Equipment: IGY monitor 10/1967-05/1968; 9-NM-64 04/1968 to present. Special purpose data available after 3-4 months, on request.

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TOKYO

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ITEM: 612

DATE:12/12/75

DISCIPLINE ---------- F01 Neutron Monitors and Supermonitors (Cosmic Rays)

STATION LATITUDE ---------- N 35.75

STATION LONGITUDE ---------- E 139.72

ALTERNATE NAMES ---------- Itabashi
Tokyo-Itabashi

DATES OF OPERATION ---------- 01/1970 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- Neutron supermonitor, 18-NM-64, with 18 counters. The number of counter will be increased. Record on paper tape every 10 minutes. Besides the total counts, the counts of the multiple events are also recorded.

RAW DATA ---------- Paper tape

DATA REDUCTION PRACTICE ---------- Regular , Special

REGULAR REDUCED DATA AVAILABLE AFTER ------ 1 MONTHS

FORM OF REDUCED DATA ---------- Magnetic tape, computer print-outs, copies, tables

DATA ROUTINELY PUBLISHED ---------- At present mimeographic copies are available.

DATA SENT TO WDC-A ---------- Yes

DATA SENT TO WDC-B ---------- Yes

DATA SENT TO WDC-C ---------- Yes
Sweden, Japan

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Masami Wada
Inst. of Physical and Chemical Researc
7-13, Kaga-1, Itabashi
Tokyo
Japan 173

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS ----- Raw 10 minute data from the instrument are on paper tape. One hour data are on magnetic tape and tables (monthly basis).

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F01 Neutron Monitors and Supermonitors (Cont.)

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UTRECHT
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ITEM: 653
DATE:27/06/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 52.06
STATION LONGITUDE	E 5.07
ALTERNATE NAMES	
DATES OF OPERATION	07/1969 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	18-NM-64 Super Neutron Monitor, cosmic rays, continuous observation, readout at 5 minute intervals, paper tape and typewriter.
RAW DATA	Paper tape, digital magnetic tape, computer printouts
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	*Computer printouts*
DATA ROUTINELY PUBLISHED	MONTHLY BULLETIN OF IONOSPHERIC, GEOMAGNETIC, COSMIC RAY DATA (Publication of Royal Meteorological Institute, De Bilt, The Netherlands)
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	Yes
DATA AVAILABLE ON REQUEST	Itabashi (Tokyo), Umea (Sweden)
ADDRESS FOR INFORMATION ABOUT STATION	J. Skolnik Natuurkundig Lab der Univ van Amsterdam Valckenierstraat 65 Amsterdam The Netherlands
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	From July 1969 through March 1972 the instrument contained only 17 countertubes; from April 1972 onward 18 counters are operating.

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YAKUTSK

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ITEM: 678

DATE:12/12/75

DISCIPLINE	F01 Neutron Monitors and Supermonitors (Cosmic Rays)
STATION LATITUDE	N 62.02
STATION LONGITUDE	E 129.72
ALTERNATE NAMES	
DATES OF OPERATION	01/1958 to present Operation intermittent
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Neutron monitor, recordings of cosmic ray neutron component, counting rate N is 18000 imp/h.
RAW DATA	Microfilm (1957-1967), perforated tape (1967-present)
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Monthly tables of 2 averages, hourly tables from 1971
DATA ROUTINELY PUBLISHED	COSMIC DATA, Monthly Review, publ. Nauka, Moscow 01/1964-12/1969
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Cosmic Ray Variation Lab Inst Cosmophysical Research & Aerono Lenin Avenue, 31 Yakutsk USSR 677007
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Gap in operation from 10/1969 to 12/1970; in 2/1971 the neutron monitor is an NM-64, one section consists of 6 counters, counting rate N 160 000imp/h.

F02 Ioniozation Chambers

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HONG KONG
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ITEM: 269
DATE:12/12/75

DISCIPLINE ---------- F02 Ionization Chambers (Cosmic Rays)
STATION LATITUDE ---------- N 22.42
STATION LONGITUDE ---------- E 114.20
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 08/1970 to present
Station moved
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Cosmic ray muon detector - ionization chamber, continuous pen recorder through a vibrating reed electrometer, 12.7 cm/h. The chamber has about 20 l inner volume with pure argon of about 40 atms shielded by 10 cm lead.

RAW DATA ---------- Continuous trace on paper roll, return zero level every hour

DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 6 MONTHS
FORM OF REDUCED DATA ---------- Hourly values on magnetic tape, computer printouts

DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Yes
Japan

DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Lien Sheng Chuang
The Chinese University of Hong Kong
Shatin, New Territories
Hong Kong

ADDRESS FOR INFORMATION ABOUT DATA -------- Masami Wada
The Inst of Physical and Chemical Res
7-13, Kaga-1, Itabashi
Tokyo
Japan

ADDITIONAL COMMENTS ----- Special purpose data available after 2 months. From 06/1975, the instrument was moved to a new building.

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MT NORIKURA

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ITEM: 416

DATE:12/12/75

DISCIPLINE	F02 Ionization Chambers (Cosmic Rays)
STATION LATITUDE	N 36.11
STATION LONGITUDE	E 137.55
ALTERNATE NAMES	
DATES OF OPERATION	08/1955 to present Station moved
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionization chamber, Cosmic ray muon detector, Continuous pen recorder through a vibrating reed electrometer. The chamber has about 20 l inner volume, with pure argon of about 40 atms. Shielded by 10 cm lead.
RAW DATA	Continuous trace on paper roll, Return zero level every hour
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Hourly values are on magnetic tape, computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes Japan
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Masami Wada The Inst of Phys & Chem Research 7-13, Kaga-1, Itabashi Tokyo Japan 173
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	After the atmospheric temperature correction and some other correction, the data will be published. The observing building was changed in October, 1967. Special purpose data usually available after 1 month.

F02 Ioniozation Chambers (Cont.)

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TOKYO-ITABASHI
****

ITEM: 613
DATE:12/12/75

DISCIPLINE	F02 Ionization Chambers (Cosmic Rays)
STATION LATITUDE	N 35.75
STATION LONGITUDE	E 139.72
ALTERNATE NAMES	Itabashi-Tokyo
DATES OF OPERATION	01/1948 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionization chamber, Cosmic ray muon detector, Continuous pen recorder through a vibrating reed electrometer 6 cm/h. The chamber has about 20 liter inner volume, with pure argon at about 40 atms. Shielded by 10 cm lead.
RAW DATA	Continuous trace on paper roll, return zero level every hour.
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Hourly values are on magnetic tape, computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	No
DATA SENT TO WDC-B	No
DATA SENT TO WDC-C	Yes
	Japan
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Masami Wada Inst. of Physical and Chemical Research 7-13, Kaga-1, Itabashi Tokyo Japan 173
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	There is very slow leakage of the gas, which needs correction. After the correction is completed, and the temperature (atmospheric) correction is done, the data are published.

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YAKUTSK

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ITEM: 679
DATE:12/12/75

DISCIPLINE	F02 Ionization Chambers (Cosmic Rays)
STATION LATITUDE	N 62.02
STATION LONGITUDE	E 129.72
ALTERNATE NAMES	
DATES OF OPERATION	07/1953 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Ionization Chamber (ASK-1), continuous recordings of hourly averages of cosmic ray hard component and ionization shocks. The chamber volume is 950 liters, J = 1.61x10E07 cor.ion/s, hourly accuracy 0.12%, barometric coefficient 0.11%mb (+ or -).
RAW DATA	Photographic paper
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Monthly tables of cosmic ray intensity hourly means (1953-75)
DATA ROUTINELY PUBLISHED	COSMIC DATA, Monthly Review, publ. Nauka, Moscow, (01/1964-12/1966)
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	Yes
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Cosmic Ray Var Lab, Yakutsk Br, Siberia Inst Cosmophysical Research & Aeronomy Lenin Avenue, 31 Yakutsk USSR 677007
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Continuous recordings in Yakutsk without gaps.

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F03 Meson Telescope

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AHMEDABAD
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ITEM: 733
DATE: 00/00/75

DISCIPLINE ---------- F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE ---------- N 23.01
STATION LONGITUDE ---------- E 72.60
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Meson Telescope
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER -------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------- Prof. Ram Gopal Rastogi
Physical Research Laboratory
Navrangpura
Ahmedabad Gujarat
India 380009

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS -------

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ALMA-ATA
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ITEM: 13
DATE:09/12/75

DISCIPLINE	FØ3 Meson Telescope (Cosmic Rays)
STATION LATITUDE	N 43.25
STATION LONGITUDE	E 76.92
ALTERNATE NAMES	Cosmic Ray Lab, Kazakh State U
DATES OF OPERATION	Ø1/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	1)Wide Angle Meson Telescope, effective area 7 sq m. Data taken on a 15 minute basis. 2)Super Meson Telescope with plastic scintillators (began operation Ø1/1974), data taken on hourly basis.
RAW DATA	Tables
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Cosmic Ray Laboratory Kazakh State University Kirov St., 136 Alma-Ata Kazakhstan USSR
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ABATITY

ITEM: 22
DATE:Ø1/12/75

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ALERT
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ITEM: 9
DATE:16/06/75

DISCIPLINE ---------- F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE ---------- N 82.50
STATION LONGITUDE ---------- E 297.67
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 10/1965 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 4-MT-64 Muon Monitor, cosmic ray muon intensity. The monitor consists of eight 1m-squared cubic telescopes and one wide angle 2m x 2m x 1m telescope. The monitor is described in ANNALS OF THE IQSY, Vol. 1, 178 (1968). The counting totals of the cubic and wide angle telescopes are recorded on punched paper tape at 5-minute intervals.

RAW DATA ---------- Punched paper tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Tables, graphs, magnetic tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. M. Bercovitch
National Research Council of Canada
100 Sussex Drive
Ottawa Ontario
Canada K1A 0R6

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Measurements of upper air temperature are made twice daily by the Canadian Atmospheric Environment Service on site.

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APATITY
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ITEM: 22
DATE:01/12/75

DISCIPLINE ---------- F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE ---------- N 67.50
STATION LONGITUDE ---------- E 33.33
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1967 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Muon Detector, crossed wide angle muon telescope, 15 minute average data.

RAW DATA ---------- Tables, computer printouts
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- L. L. Lazutin
Polar Geophysical Institute
Academy of Sciences of the USSR
Apatity Murmansk Region
USSR 184200

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 1 month.

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415

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F03 Meson Telescope (Cont.)

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BUDAPEST
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ITEM: 740
DATE:00/00/75

DISCIPLINE	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE	N 47.49
STATION LONGITUDE	E 18.96
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Underground Telescope
RAW DATA	Magnetic tape (not IBM compatible)
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. A. J. Somogyi Hungarian Acad of Sci, Central Res Ins P.O.B. 49 Budapest Hungary H-1525 114
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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CHACALTAYA

ITEM: 103
DATE:21/01/76

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DEEP RIVER

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ITEM: 146

DATE:23/06/75

DISCIPLINE ---------- F03 Meson Telescope (Cosmic Rays)

STATION LATITUDE ---------- N 46.10

STATION LONGITUDE ---------- E 282.50

ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 01/1965 to present

OBSERVING SCHEDULE ---------- Regular

INSTRUMENT DESCRIPTION ----- 4-MT-64 Muon Monitor. Cosmic Ray Muon Intensity. The Monitor consists of eight 1m-sq cubic telescopes and one wide angle 2mx2mx1m telescope. The Monitor is described in Annals of the IQSY, Vol. 1, 178 (1968). The counting totals of the cubic and wide angle telescopes are recorded on punched paper tape at 5-minute intervals.

RAW DATA ---------- Punched paper tape

DATA REDUCTION PRACTICE ---------- Regular

REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS

FORM OF REDUCED DATA ---------- Tables, graphs, magnetic tape

DATA ROUTINELY PUBLISHED ----------

DATA SENT TO WDC-A ----------

DATA SENT TO WDC-B ----------

DATA SENT TO WDC-C ----------

DATA AVAILABLE ON REQUEST ---------- Yes

ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. M. Bercovitch
Herzberg Inst of Astrophysics, NRCC
100 Sussex Drive
Ottawa Ontario
Canada K1A OR6

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above

ADDITIONAL COMMENTS ----- Measurements of upper air temperature are made twice daily by the Canadian Atmospheric Environment Service (at Maniwaki, Quebec, 120 km east of Deep River).

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ITEM: 1052

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CHACALTAYA
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ITEM: 103
DATE:21/01/76

DISCIPLINE ---------- F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE ---------- S 16.31
STATION LONGITUDE ---------- E 291.80
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1965 to present
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION ----- Meson Telescope
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Tables, punched paper tapes
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Instituto de Investigaciones Fisicas
Laboratorio de Fisica Cosmica
Universidad Mayor de San Andres
La Paz
Bolivia

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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DENVER

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ITEM: 1052
DATE:14/02/75

DISCIPLINE	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE	N 39.75
STATION LONGITUDE	E 255.00
ALTERNATE NAMES	University of Denver
DATES OF OPERATION	01/1965 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Narrow angle vertical and N,S,E,W tilted telescopes; omnidirectional telescope, 15 min counting rates, barometric pressure, cosmic rays
RAW DATA	Punched paper tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	12 MONTHS
FORM OF REDUCED DATA	Computer printouts and/or punched cards and/or magnetic tape
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Prof. R. L. Chasson Department of Physics and Astronomy University of Denver Denver CO USA 80210
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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416

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F03 Meson Telescope (Cont.)

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DOURBES
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ITEM: 701
DATE:00/00/75

DISCIPLINE	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE	N 50.10
STATION LONGITUDE	E 4.60
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Meson Telescope
RAW DATA	
DATA REDUCTION PRACTICE	
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Prof. Lucien G. A. Bossy Inst Royal Meteorologique, Geophys E 3, Avenue Circulaire Bruxelles Belgium 1180
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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ITEM: 164

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GOOSE BAY

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ITEM: 211
DATE:16/06/75

DISCIPLINE ---------- F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE ---------- N 53.27
STATION LONGITUDE ---------- E 299.60
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 11/1964 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- 4-MT-64 Muon Monitor, cosmic ray muon intensity; The monitor consists of eight 1 m-sq cubic telescopes and one wide angle 2mx2mx1m telescope. The monitor is described in Annals of the IQSY, Vol. 1, 178 (1968). The counting totals of the cubic and wide angle telescopes are recorded on punched paper tape at 5 min intervals.
RAW DATA ---------- Punched paper tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Tables, graphs, magnetic tape
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. M. Bercovitch
Herzberg Inst of Astrophys, NRC Canad
100 Sussex Drive
Ottawa Ontario
Canada K1A 0R6

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Measurements of upper air temperature are made twice daily by the Canadian Atmospheric Environment Service on site.

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ITEM: 715

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EMBUDO
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ITEM: 164
DATE:12/01/76

DISCIPLINE ----------
F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE ---------- N 35.20
STATION LONGITUDE ---------- E 253.32
ALTERNATE NAMES ----------

DATES OF OPERATION ---------
01/1965 to present
OBSERVING SCHEDULE --------- Regular
INSTRUMENT DESCRIPTION ----- Underground (40 mwe) muon multi-directional telescope, using plastic scintillators: wide-angle vertical count rate approx. 400,000/h. Data recorded hourly on film. Continuous operation.

RAW DATA ----------
Film
DATA REDUCTION PRACTICE ---------- , Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Derek B. Swinson
Physics Dept., Univ. of New Mexico
800 Yale NE
Albuquerque New Mexico
USA 87131

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Part of a network of three identical telescopes: Mt. Chacaltaya, Boliva (25 mwe); Embudo Cave, New Mexico (40 mwe) and Socorro, New Mexico (80 mwe).

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HOBART

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ITEM: 715

DATE:00/00/75

3d

DISCIPLINE	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE	S 42.92
STATION LONGITUDE	E 147.20
ALTERNATE NAMES	
DATES OF OPERATION	
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Meson Telescope, Underground Telescope
RAW DATA	
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tabular matter
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. A. G. Fenton Hobart Cosmic Ray Res Gr, Dept of Phy G.P.O. Box 252 C Hobart Tasmania Australia 7001
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Short term data for selected events available in retrospect.

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417

F03 Meson Telescope (Cont.)

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INUVIK
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ITEM: 282
DATE:16/06/75

4a

DISCIPLINE ----------	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE ----------	N 68.35
STATION LONGITUDE ----------	E 226.28
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1964 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	4-MT-64 Muon Monitor, cosmic ray muon intensity--The Monitor consists of eight 1 sq-m cubic telescopes and one wide angle 2mx2mx1m telescope. The Monitor is described in ANNALS OF THE IQSY, Vol. 1, 178 (1968). The counting totals of the cubic and wide angle telescopes are recorded on punched paper tape at 5-min intervals.
RAW DATA ----------	Punched paper tape
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	12 MONTHS
FORM OF REDUCED DATA ----------	Tables, graphs, magnetic tape
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. M. Bercovitch Herzberg Inst Astrophysics, NRC Canada 100 Sussex Drive Ottawa Ontario Canada K1A 0R6
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Measurements of upper air temperature are made twice daily by the Canadian Atmospheric Environment Service on site.

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MAWSON

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ITEM: 823

DATE:00/00/75

DISCIPLINE ----------	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE ----------	S 67.60
STATION LONGITUDE ----------	E 62.80
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	05/1955 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Meson Telescope, under 40 meters water equivalent (mwe) of absorber aligned as follows: 1) along the geomagnetic field direction; 2)normal to the geomagnetic field direction; 3)asymptotic viewing normal to the rotational axis; 4)asymptotic viewing along the rotational axis.
RAW DATA ----------	Punched paper tape
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. R. M. Jacklyn Physics Dept., Univ. of Tasmania G.P.O. Box 252C Hobart Tasmania Australia 7001
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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ITEM: 1007

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IRKUTSK

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ITEM: 873

DATE:00/00/75

DISCIPLINE ----------	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE ----------	N 52.47
STATION LONGITUDE ----------	E 104.03
ALTERNATE NAMES ----------	Zui
DATES OF OPERATION ----------	11/1957 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Meson Telescope
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. A. A. Luzov SibIZMIR P.O.B. 4 Irkutsk USSR 33
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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MEXICO
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ITEM: 1007
DATE:05/11/75

DISCIPLINE	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE	N 19.33
STATION LONGITUDE	E 260.82
ALTERNATE NAMES	CU (Ciudad Universitaria)
DATES OF OPERATION	06/1976 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Meson Telescope
RAW DATA	Paper tape, computer printouts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Javier A. Otaola Instituto de Geofisica Ciudad Universitaria Mexico City Mexico 20, D.F.
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Due to local conditions, all detectors have been out of ooperation since December 1974. Restarting operation planned for June 1976. Special purpose data available after 1 month.

418

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F03 Meson Telescope (Cont.)

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MT NORIKURA
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ITEM: 417
DATE:03/03/75

DISCIPLINE	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE	N 36.11
STATION LONGITUDE	E 137.55
ALTERNATE NAMES	
DATES OF OPERATION	11/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Multi-Directional Meson Telescope, Cosmic Ray Total Component Intensities from 13 directions, with 36 sq m X 2 layers plastic scintillators, no absorber. Continuous observation with 15 min. accumulation time, raw data punched out on paper tapes. Hourly values of barometer corrected relative intensities are prepared on solar rotation basis.
RAW DATA	Paper tapes, Analog chart for monitoring.
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Magnetic tape, computer printouts
DATA ROUTINELY PUBLISHED	Report of Cosmic Ray Research Laboratory, Nagoya Univ: No. 2 (1975) includes data for 1972-1973.
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes
	Tokyo, Japan
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	K. Nagashima Cosmic Ray Res Lab, Nagoya Univ Furo-cho, Chikusa-ku Nagoya Japan 464
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

418

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NAGOYA

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ITEM: 424
DATE:03/03/75

DISCIPLINE	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE	N 35.15
STATION LONGITUDE	E 136.97
ALTERNATE NAMES	
DATES OF OPERATION	10/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Multi-directional Meson Telescope observes Cosmic Ray Meson Intensities from 17 directions. Multi-directional(17 directions) meson intensities with 36 sq m X 2 layers plastic scintillators with 5cm Pb absorber. Continuous observation with 15 min. accumulation period, raw data punched out on paper tapes. Hourly values of barometer corrected relative intensities are prepared on solar rotation basis.
RAW DATA	Paper tapes, analog chart for monitoring
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Magnetic tape, computer printouts
DATA ROUTINELY PUBLISHED	Report of Cosmic Ray Research Laboratory, Nagoya Univsity, No. 1 (1975) includes data for 1970-1973 Hourly data tables and plots.
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Yes
	Tokyo, Japan
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	K. Nagashima Cosmic Ray Res Lab, Nagoya Univ Furo-cho, Chikusa-ku Nagoya Japan 464
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

AD-A055 001 AIR FORCE GEOPHYSICS LAB HANSCOM AFB MASS F/G 4/1
DIRECTORY OF SOLAR-TERRESTRIAL PHYSICS MONITORING STATIONS.(U)
NOV 77 H E COFFEY, M A SHEA

UNCLASSIFIED AFGL-TR-77-0255 NL

13 OF 13
AD
A055 001



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DATE
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7-78
DDC

1 419

F03 Meson Telescope (Cont.)

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SOCORRO
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ITEM: 563
DATE:14/01/76

DISCIPLINE	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE	N 34.04
STATION LONGITUDE	E 253.07
ALTERNATE NAMES	
DATES OF OPERATION	03/1968 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Underground muon telescope (80mwe), multi-directional, using plastic scintillators: wide-angle vertical count rate 100000/h. Data recorded hourly on film. Continuous operation.
RAW DATA	Film
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Hourly counting rates; daily harmonic dials in solar time.
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Derek B. Swinson Physics Dept, Univ of New Mexico 800 Yale N.E. Albuquerque NM USA 87131
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Part of a network of 3 identical telescopes: Mt. Chacaltaya, Bolivia (25 m.w.e.); Embudo Cave, New Mexico (40 m.w.e.) and Socorro, New Mexico (80 m.w.e.)

419

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ITEM: 592

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UTRECHT
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ITEM: 700
DATE:00/00/75

DISCIPLINE ----------	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE ----------	N 52.08
STATION LONGITUDE ----------	E 5.13
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Meson Telescope
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. M. Arens Natuurkundig Lab, Univ van Amsterdam Valckenierstraat 65 Amsterdam C The Netherlands
ADDRESS FOR INFORMATION ABOUT DATA ----------	Same as above
ADDITIONAL COMMENTS ------	

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TAKEYAMA
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ITEM: 592
DATE:12/12/75

DISCIPLINE	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE	N 35.22
STATION LONGITUDE	E 139.62
ALTERNATE NAMES	
DATES OF OPERATION	01/1970 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Underground muon detector. Crossed telescope. Nine 1 m sq plastic scintillators are set three by three. Two layers construct vertical, inclined (30 degrees and 50 degrees) four azimuthal directions. The average counts/h is 40000 for the vertical component. Hourly counts are punched on paper tape. 54 m.w.e.
RAW DATA	Paper tapes
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	3 MONTHS
FORM OF REDUCED DATA	Magnetic tapes, computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Kazuaki Murakami The Inst of Physical & Chemical Resea 7-13, Kaga-1, Itabashi Tokyo Japan 173
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

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F03 Meson Telescope (Cont.)

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420

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YAKUTSK
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ITEM: 681
DATE:12/12/75

DISCIPLINE	F03 Meson Telescope (Cosmic Rays)
STATION LATITUDE	N 62.02
STATION LONGITUDE	E 129.72
ALTERNATE NAMES	
DATES OF OPERATION	01/1958 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Muon azimuthal telescope, recording of cosmic ray muon component on vertical & towards South; North is under 30 degree angle to the zenith: 1)on Earths surface, counting rate on vertical 100000 imp/h; 2)at 20m depth w.e., counting rate on vertical 35000imp/h (gaps in operation 1964-66); 3)at 7m depth w.e., counting rate on vertical 70000imp/h (gap in operation 4/1967-3/1969); 4)at 60m depth w.e., counting rate on vertical 10000 imp/h (from 1963 the instrument location changed to East and West instead of South and North).
RAW DATA	Microfilms (1958-1967), perforated tapes (1967-present)
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Monthly tables-2h means (1957-70), hourly tables (1971-present)
DATA ROUTINELY PUBLISHED	HIGH ENERGY COSMIC RAY VARIATIONS, publ. Nauka, Moscow, 1964; COSMIC RAY VARIATIONS AND SOLAR ACTIVITY, publ. Nauka, Moscow 1968, author A. I. Kuzmin
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Cosmic Ray Var Lab, Yakutsk Br, Siber Inst Cosmophysical Research & Aeronom Lenin Avenue, 31 Yakutsk USSR 677007
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	

421

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F04 Balloon Measurements

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ALMA-ATA
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ITEM: 14
DATE:09/12/75

DISCIPLINE ----------	F04 Balloon Measurements (Cosmic Rays)
STATION LATITUDE ----------	N 43.25
STATION LONGITUDE ----------	E 76.92
ALTERNATE NAMES ----------	Cosmic Ray Lab, Kazakh State U
DATES OF OPERATION ----------	01/1962 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Balloon Measurements of total and directed intensity -- one flight per day.
RAW DATA ----------	Tables
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	PHYSICS INSTITUTE, Academy of Sciences, USSR (FISICHESKII INSTITUT)
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Cosmic Ray Laboratory Kazakh State University Kirov St., 136 Alma-Ata Kazakhstan USSR
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

421

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ALMA-ATA
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ITEM: 15
DATE:02/10/75 16

DISCIPLINE	F04 Balloon Measurements (Cosmic Rays)
STATION LATITUDE	N 43.25
STATION LONGITUDE	E 76.92
ALTERNATE NAMES	Cosmic Ray Lab, Kazakh State U
DATES OF OPERATION	03/1962 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	RKI Radiosonde stratospheric cosmic ray intensity measurements. RKI Radiosonde consists of 2 G-M tubes arranged as telescope interlayed by a 7 mm thick aluminium plate. Wall thickness of G-M tube is 0.05 g/square cm of steel. The counting rate of a single counter and 2-counter coincidences are recorded. The balloons are launched every day at 0700 UT, except Sundays.
RAW DATA	Tables, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables of cosmic ray flux dependence on stratospheric pressure
DATA ROUTINELY PUBLISHED	COSMIC DATA, Nauka Publishing House, Moscow, data since January 1972
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Yu. I. Stozhkov P. N. Lebedev Physical Institute Leninsky Prospect, 53 Moscow USSR 117313
ADDRESS FOR INFORMATION ABOUT DATA	Dr. G. A. Bazilevkaya P. N. Lebedev Physical Institute Leninsky Prospect, 53 Moscow USSR 117313
ADDITIONAL COMMENTS	

1 422

F04 Balloon Measurements (Cont.)

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MIRNY
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ITEM: 405
DATE: 02/10/75

DISCIPLINE	F04 Balloon Measurements (Cosmic Rays)
STATION LATITUDE	S 66.57
STATION LONGITUDE	E 92.92
ALTERNATE NAMES	
DATES OF OPERATION	03/1963 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Balloon Cosmic Ray Intensity Measurement in Stratosphere. RKI-radiosound consists of two G-M tubes arranged as telescope interlayed by a 7 mm thick aluminium plate. Wall thickness of G-M tube is 0.05 G. cm of steel. The counting rate of a single counter and two-counter coincidences are recorded. The balloons are launched every day at 0700 UT.
RAW DATA	Tables, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1.5-2 MONTHS
FORM OF REDUCED DATA	Tables of cosmic ray flux dependence on stratospheric pressure
DATA ROUTINELY PUBLISHED	Beginning from January, 1972, data on Cosmic Ray Intensity at Transition Maximum in stratosphere are routinely published by Soviet Review of COSMIC DATA, Publishing House Nauka, Moscow.
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Yu I. Stozhkov P. N. Lebedev Physical Institute Leninsky Prospect, 53 Moscow USSR 117313
ADDRESS FOR INFORMATION ABOUT DATA	Dr. G. A. Bazilevskaya P. N. Lebedev Physical Institute Leninsky Prospect, 53 Moscow USSR 117313
ADDITIONAL COMMENTS	

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MOSCOW
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ITEM: 408
DATE: 02/10/75

DISCIPLINE	F04 Balloon Measurements (Cosmic Rays)
STATION LATITUDE	N 55.93
STATION LONGITUDE	E 37.52
ALTERNATE NAMES	Dolgoprudny, Moscow Reg.
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Balloon Cosmic Ray Intensity Measurement in Stratosphere. RKI-radiosound consists of two G-M tubes arranged as telescope interlayed by a 7 mm thick aluminium plate. Wall thickness of G-M tube is 0.05 G./cm sq of steel. The counting rate of a single counter and two-counter coincidences are recorded. The balloons are launched every day except Saturday and Sunday at 0530 UT.
RAW DATA	Tables, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	1.5-2 MONTHS
FORM OF REDUCED DATA	Tables of cosmic ray flux dependence on stratospheric pressure
DATA ROUTINELY PUBLISHED	Beginning from January, 1972, data on Cosmic Ray Intensity at Transition Maximum in stratosphere are routinely published by Soviet Review of COSMIC DATA, Publishing House Nauka, Moscow.
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Yu I. Stozhkov P. N. Lebedev Physical Institute Leninsky Prospect, 53 Moscow USSR 117313
ADDRESS FOR INFORMATION ABOUT DATA	Dr. G. A. Bazilevskaya P. N. Lebedev Physical Institute Leninsky Prospect, 53 Moscow USSR 117313
ADDITIONAL COMMENTS	

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F04 Balloon Measurements (Cont.)

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MURMANSK
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ITEM: 1008
DATE: 02/10/75

DISCIPLINE	F04 Balloon Measurements (Cosmic Rays)
STATION LATITUDE	N 68.95
STATION LONGITUDE	E 33.05
ALTERNATE NAMES	Olenja, Murmansk Region
DATES OF OPERATION	07/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Balloon Cosmic Ray Intensity Measurement in Stratosphere, RKI Radiosound consists of 2 G-M tubes arranged as telescope interlayed by a 7 mm thick aluminum plate. Wall thickness of G-M tube is 0.05 g/cm sq of steel. The counting rate of a single counter and two-counter coincidences are recorded. The balloons are launched every day at 0700 UT and every day except Sunday at 1100 UT.
R[illegible]DATA	Tables, drawings
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	2 MONTHS
FORM OF REDUCED DATA	Tables of cosmic ray flux dependence on stratospheric pressure
DATA ROUTINELY PUBLISHED	COSMIC DATA (Nauka, Moscow) Cosmic Ray Intensity at Transition Maximum in Stratosphere, appear routinely since January 1972
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	
ADDRESS FOR INFORMATION ABOUT STATION	Dr. Yu. I. Stozhkov P.N. Lebedev Physical Institute Leninsky Prospect, 53 Moscow USSR 117313
ADDRESS FOR INFORMATION ABOUT DATA	Dr. G. A. Bazilevskaya P.N. Lebedev Physical Institute Leninsky Prospect, 53 Moscow USSR 117313
ADDITIONAL COMMENTS	07/1957 to 04/1958 observations occasional; since 05/1958 observations are regularly scheduled.

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G. Airglow

426

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G01 Airglow

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ABERDEEN
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ITEM: 1
DATE:02/06/75

DISCIPLINE	G01 Airglow
STATION LATITUDE	N 57.15
STATION LONGITUDE	E 357.87
ALTERNATE NAMES	
DATES OF OPERATION	01/1976 to present
OBSERVING SCHEDULE	Occasional
INSTRUMENT DESCRIPTION	Michelson airglow interferometer - wide field. Large path difference built in to enable the measurements of Doppler shifts of airglow emission lines; can be set to be used at small path difference to yield emission radiances with good discrimination against background continuum.
RAW DATA	Chart
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. M. Gadsden Department of Natural Philosophy Aberdeen University Aberdeen Scotland AB9 2UE
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Twilight gives severe interference in June and July and the length of night is severely limited in May and August. Special purpose data available after 12 months.

426

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ITEM: 777

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ARECIBO
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ITEM: 31
DATE:30/01/76

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- N 18.35
STATION LONGITUDE ---------- E 293.25
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1969 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ----- Tilting filter photometer, 4 photometers at different wavelengths. Usually run during suitable moon and weather conditions. 6300, 5577, and other wavelengths. Digital recording on mag tape and machine reduction of data.

RAW DATA ---------- Strip chart, digital magnetic tape
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Graphical plots, computer printout
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- James C. G. Walker
Arecibo Observatory
Post Office Box 995
Arecibo
Puerto Rico 00612

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Interferometer, spectrometer, spatial scanner. Special purpose data available after 1 month.

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ITEM: 207

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ADELAIDE

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ITEM: 777

DATE:00/00/75

16

DISCIPLINE ----------	G01 Airglow
STATION LATITUDE ----------	S 34.60
STATION LONGITUDE ----------	E 138.40
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Airglow Photometer, Interferometer
RAW DATA ----------	
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Tabular matter, strip charts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Dr. Frederick J. Jacka Mawson Inst for Antarctic Research University of Adelaide Adelaide S. A. Australia 5001
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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ARECIBO
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ITEM: 207
DATE:30/01/76

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- N 18.35
STATION LONGITUDE ---------- E 293.25
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 1973 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ----- Fabry-Perot airglow interferometer (15 cm diam.) operation still very irregular, used for 5577A temperatures.
RAW DATA ---------- Digital magnetic tape
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- James C. G. Walker
Arecibo Observatory
Post Office Box 995
Arecibo
Puerto Rico 00612

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Instrument is available for visitor use, but no data is available on request. Other instruments include photometers, spectrometer, and spatial scanner. Spatial scanning photometer is fixed filter instrument used for mapping airglow structure. 1m Ebert-Fastie spectrometer is used for special studies of weak emissions, bands, rotational temperatures.

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G01 Airglow (Cont.)

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ASHKHABAD
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ITEM: 844
DATE:00/00/75

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- N 37.90
STATION LONGITUDE ---------- E 58.40
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Occasional
INSTRUMENT DESCRIPTION ------ Airglow photometer at 5577A, 5890A and 6300A.
RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ A. P. Savrouchin
Inst Phys Earth & Atm, Acad Sci Turkm
Gogol Street 16
Ashkhabad
USSR 744019

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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ITEM: 33

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BEVERIDGE

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ITEM: 771
DATE:00/00/75

DISCIPLINE ----------	G01 Airglow
STATION LATITUDE ----------	S 37.47
STATION LONGITUDE ----------	E 144.93
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION ------	Airglow photometer 5577A, 6300A
RAW DATA ----------	Strip charts
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER -------	MONTHS
FORM OF REDUCED DATA ----------	Strip charts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION ------	Prof. Keith D. Cole Department of Physics La Trobe University Bundoora Victoria Australia 3083
ADDRESS FOR INFORMATION ABOUT DATA ---------	Same as above
ADDITIONAL COMMENTS ------	

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ITEM: 71

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ASPENDALE
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ITEM: 33
DATE:19/01/76

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DISCIPLINE	G01 Airglow
STATION LATITUDE	S 38.02
STATION LONGITUDE	E 145.07
ALTERNATE NAMES	
DATES OF OPERATION	06/1955 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Dobson ozone spectrophotometer - measurements of total ozone twice a day, Umkehr observations twice a week.
RAW DATA	Tables
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Table
DATA ROUTINELY PUBLISHED	OZONE DATA FOR THE WORLD, Dept. of Environment and WMO, Canada
DATA SENT TO WDC-A	Yes
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	Canada
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. R. N. Kulkarni CSIRO Div. of Atmospheric Physics Station Street Aspendale Victoria Australia 3195
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 1 month.

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BRISBANE
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ITEM: 71
DATE:19/01/76

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- S 27.50
STATION LONGITUDE ---------- E 152.90
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 09/1956 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Dobson Ozone Spectrophotometer, measurement of total ozone twice a day. Measurement of Umkehr observation twice a week.

RAW DATA ---------- Tables
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- OZONE DATA FOR THE WORLD, Dept. of Environment and WMO-Canada.
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- Canada
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. R. N. Kulkarni
CSIRO Div. of Atmospheric Physics
Station Street
Aspendale Victoria
Australia 3195

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data available after 1 month.

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428

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G01 Airglow (Cont.)

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CACHOEIRA PAULISTA
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ITEM: 536
DATE:04/04/73

DISCIPLINE	G01 Airglow
STATION LATITUDE	S 22.70
STATION LONGITUDE	E 314.80
ALTERNATE NAMES	San Jose
DATES OF OPERATION	03/1975 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	All-sky scanning photometer. It is an automatic all-sky scanning airglow photometer using filter-wheel technique. The photometer will be used to study the 0I 6300 A and 5577 A, NaD nightglow emissions. It is proposed to operate the photometer for about 10 days around new moon.
RAW DATA	Paper tape, computer printouts
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	1 MONTHS
FORM OF REDUCED DATA	Tables, computer printouts
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Y. Sahai Instituto de Pesquisas Espaciais Av. dos Astronautas, 1758 Sao Jose dos Campos Sao Paulo Brasil 12.200
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	It is also proposed to operate a zenith photometer to observe the NI 5200 A and N+ 4278 A emissions. Special purpose data usually available after 1 month.

428

ITEM: 1057

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EL LEONCITO
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ITEM: 762
DATE:00/00/75

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- S 31.80
STATION LONGITUDE ---------- E 290.70
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------
Airglow photometer, 5300A, 5577A, 5893A, 6300A
RAW DATA ---------- Strip charts, pen and ink
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Mr. Rodolfo Agustin Perello
Obs Astronomico Felix Aguilar, Cenlu
Avda. Benavidez 8175 Oeste
San Juan
Argentina

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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DUMONT dURVILLE

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ITEM: 1057
DATE:02/06/75

DISCIPLINE	G01 Airglow
STATION LATITUDE	S 66.67
STATION LONGITUDE	E 140.00
ALTERNATE NAMES	Terre Adelie
DATES OF OPERATION	01/1957 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Airglow photometers, regular observations under cloudless and moonlit conditions.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER	18 MONTHS
FORM OF REDUCED DATA	Computer printout
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	G. Weill Institut dAstrophysique 98 bis Bd Arago Paris France 750 14
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 18 months.

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HAUTE PROVENCE
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ITEM: 243
DATE:02/06/75

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- N 43.92
STATION LONGITUDE ---------- E 5.72
ALTERNATE NAMES ----------

DATES OF OPERATION ---------- 07/1955 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Photometers, regular operations under cloudless and moonlight conditions.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 12 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- G. Weill
Institut d'Astrophysique
98 bis Bd Arago
Paris
France 750 1h

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data availble after 2 months.

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G01 Airglow (Cont.)

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HOBART

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ITEM: 1156
DATE:19/01/76

DISCIPLINE ----------	G01 Airglow
STATION LATITUDE ----------	S 42.90
STATION LONGITUDE ----------	E 147.20
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	07/1967 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Dobson Ozone Spectrophotometer, measurements of total ozone done 3 times a day, measurement of Umkehr observations for vertical distribution of ozone done twice a week depending on weather.
RAW DATA ----------	Tables
DATA REDUCTION PRACTICE ----------	Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------	2 MONTHS
FORM OF REDUCED DATA ----------	Tables
DATA ROUTINELY PUBLISHED ----------	OZONE DATA FOR THE WORLD, Dept. of Environment in cooperation with WMO, Ontario, Canada
DATA SENT TO WDC-A ----------	Yes
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	Canada
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. R. N. Kulkarni CSIRO Div. Atmospheric Physics Station Street Aspendale Victoria Australia 3195
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Special purpose data available after 1 month.

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ITEM: 767
DATE:00/00/75

LAUREL RIDGE

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DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- N 40.16
STATION LONGITUDE ---------- E 280.84
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Airglow photometer and interferometer, 5577A, 5890A, 5896A, and 6300A.
RAW DATA ---------- Magnetic tape, strip charts
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------ Dr. Manfred A. Biondi
Physics Department
University of Pittsburgh
Pittsburgh PA
USA 15260

ADDRESS FOR INFORMATION ABOUT DATA --------- Same as above
ADDITIONAL COMMENTS ------

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ITEM: 356
DATE:20/03/75

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KISO
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ITEM: 321
DATE:11/06/75

46

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- N 35.80
STATION LONGITUDE ---------- E 137.63
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 07/1975 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Zenith airlow photelectric photometer, hourly Zenith intensities of 5577A and 6300A, airglow emission lines are measured by using a photo-electric photometer (75 mm telescope aperture) with narrow band interference filters. Observations are made regularly on moonless clear nights every month.
RAW DATA ---------- Strip chart, punched tape
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. Hiroyoshi Tanabe
Tokyo Astronomical Observatory
Mitaka Tokyo
Japan 181

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Airglow instrument moved from Dodaira Station (N36.01 E139.21) to Kiso Station in June 1975. Data archived at Tokyo Astronomical Observatory.

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LOMNICKY STIT

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ITEM: 356

DATE: 20/03/75

DISCIPLINE	G01 Airglow
STATION LATITUDE	N 49.18
STATION LONGITUDE	E 20.22
ALTERNATE NAMES	Skalnate Pleso
DATES OF OPERATION	12/1972 to present
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Zenith photometer measuring airglow intensities of the continuum (5500 and 6000A) and emission lines (5577, 5893, 6300A). Photometer consists of the object glass (field of view about 5 degrees), 5 interference filters, photomultiplier and recording instrument. The duration of the cycle is about 3 minutes.
RAW DATA	Analog paper tape
DATA REDUCTION PRACTICE	Regular
REGULAR REDUCED DATA AVAILABLE AFTER	6 MONTHS
FORM OF REDUCED DATA	Tables of the intensities
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Milan Rybansky Astronomical Institute Skalnate Pleso Slovak Acad of Sci, Obs Lomnicky Stit Tatranska Lomnica Czechoslovakia 059 60
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Co-investigator Vojtech Rybansky

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430

G01 Airglow (Cont.)

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NIIGATA
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ITEM: 739
DATE:00/00/75

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- N 37.70
STATION LONGITUDE ---------- E 138.82
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ------ Airglow Photometer and Spectrometer
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------- MONTHS
FORM OF REDUCED DATA ---------- Tabular matter
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION ------- Dr. Bun-Iti Saito
Niigato Airglow Obs, Faculty of Scienc
Niigato University
Igarashi 2 Niigata
Japan 950-21

ADDRESS FOR INFORMATION ABOUT DATA ---------- Same as above
ADDITIONAL COMMENTS ------

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ITEM: 459

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PORT ALFRED
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ITEM: 128
DATE:02/06/75

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- S 46.43
STATION LONGITUDE ---------- E 51.87
ALTERNATE NAMES ---------- Crozet
DATES OF OPERATION ---------- 01/1973 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Airglow equipment. Multicolor photometer, regular operation under cloudless and moonlight conditions.

RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 18 MONTHS
FORM OF REDUCED DATA ---------- Computer printouts
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- G. Weill
Institut d Astrophysique
98 Bis Bd Arago
Paris
France 750 1h

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose observations are usually available after 18 months.

430

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PERTH

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ITEM: 459

DATE: 22/01/76

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- S 31.56
STATION LONGITUDE ---------- E 115.50
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 03/1969 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Dobson Ozone Spectrophotometer. Measurements of total ozone - twice a day. Measurement of Umkehr observations - once a week.
RAW DATA ---------- Tables
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 2 MONTHS
FORM OF REDUCED DATA ---------- Tables
DATA ROUTINELY PUBLISHED ---------- Ozone data for the world, Dept of Environment and WMO - Canada
DATA SENT TO WDC-A ---------- Yes
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. R. N. Kulkarni
CSIRO Div. Atm. Physics
Station Street
Aspendale Victoria
Australia 3195

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS ----- Special purpose data usually available after 1 month.

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PORT AUX FRANCAIS
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ITEM: 969
DATE:02/06/75

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- S 49.35
STATION LONGITUDE ---------- E 70.22
ALTERNATE NAMES ---------- Kerguelen
DATES OF OPERATION ---------- 07/1957 to present
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Airglow equipment, regular operations under cloudless and moonlit conditions.
RAW DATA ---------- Strip chart
DATA REDUCTION PRACTICE ---------- Regular , Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ 18 MONTHS
FORM OF REDUCED DATA ---------- Graphical plots
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- G. Weill
Institut dAstrophysique
98 bis Bd Arago
Paris
France 750 14

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS ----- Special purpose data available after 18 months.

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G01 Airglow (Cont.)

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SANAE
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ITEM: 782
DATE:00/00/75

DISCIPLINE ----------	G01 Airglow
STATION LATITUDE ----------	S 70.30
STATION LONGITUDE ----------	E 357.65
ALTERNATE NAMES ----------	
DATES OF OPERATION ----------	06/1967 to present
OBSERVING SCHEDULE ----------	Occasional
INSTRUMENT DESCRIPTION -----	Airglow Photometer, 3914A, 5577A, 6300A
RAW DATA ----------	Pen and ink strip charts
DATA REDUCTION PRACTICE ----------	
REGULAR REDUCED DATA AVAILABLE AFTER ------	MONTHS
FORM OF REDUCED DATA ----------	Pen and ink strip charts
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	
ADDRESS FOR INFORMATION ABOUT STATION -----	Dr. Gideon J. Kuhn Hermanus Magnetic Obs, AGAP P.O. Box 32 Hermanus Rep of So Africa
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	Data not directly available because station is visited only once yearly.

431

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ITEM: 581

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TENERIFE
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ITEM: 1106
DATE:03/03/75

DISCIPLINE ---------- G01 Airglow
STATION LATITUDE ---------- N 28.48
STATION LONGITUDE ---------- E 343.72
ALTERNATE NAMES ----------
DATES OF OPERATION ---------- 01/1970 to present
Intermittent operation
OBSERVING SCHEDULE ---------- Regular
INSTRUMENT DESCRIPTION ----- Spectrophotometer for airglow measurements
RAW DATA ---------- Strip charts
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Instituto Universitario de Astrofisic
Universidad de la Laguna
La Laguna Tenerife
Spain

ADDRESS FOR INFORMATION ABOUT DATA -------- Same as above
ADDITIONAL COMMENTS -----

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TSIMLJANSK

ITEM: 1161

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SUTHERLAND

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ITEM: 581

DATE:13/05/75

DISCIPLINE ----------	G01 Airglow
STATION LATITUDE ----------	S 32.38
STATION LONGITUDE ----------	E 20.81
ALTERNATE NAMES ----------	South Africa Astronomical Observatory (SAAO)
DATES OF OPERATION ----------	10/1973 to present
OBSERVING SCHEDULE ----------	Regular
INSTRUMENT DESCRIPTION -----	Tilting Filter Photometer (with meridian scanning facility). Routine airglow measurements. Observations carried out at dark moon (8 nights per month). Intensities of 630.0, 557.7 and 520.0 mm airglow lines monitored routinely throughout the night. 486.1 and 391.4 mm lines observed on an experimental basis.
RAW DATA ----------	Strip chart, punched paper tape (for limited period, 6 months)
DATA REDUCTION PRACTICE ----------	Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------	3 MONTHS
FORM OF REDUCED DATA ----------	Computer printouts, graphical plots
DATA ROUTINELY PUBLISHED ----------	
DATA SENT TO WDC-A ----------	
DATA SENT TO WDC-B ----------	
DATA SENT TO WDC-C ----------	
DATA AVAILABLE ON REQUEST ----------	Yes
ADDRESS FOR INFORMATION ABOUT STATION -----	The Director Natl Inst for Telecommunications Res P.O. Box 3718 Johannesburg Rep of So Africa 2000
ADDRESS FOR INFORMATION ABOUT DATA --------	Same as above
ADDITIONAL COMMENTS -----	

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TSIMLJANSK
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ITEM: 1161
DATE:23/02/77

DISCIPLINE ---------- GØ1 Airglow
STATION LATITUDE ---------- N 47.70
STATION LONGITUDE ---------- E 42.00
ALTERNATE NAMES ----------
DATES OF OPERATION --------- Ø9/1974 to present
OBSERVING SCHEDULE ---------
INSTRUMENT DESCRIPTION ----- Airglow photometer
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Special
REGULAR REDUCED DATA AVAILABLE AFTER ------ MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- at

DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION ----- Dr. N. V. Pushkov
IZMIRAN
PO Akademgorodok
Moscow Region
USSR 142 092

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS ----- Special purpose data available after 3 months.

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G01 Airglow (Cont.)

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VELETA
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ITEM: 88
DATE:06/06/75

DISCIPLINE	G01 Airglow
STATION LATITUDE	N 37.10
STATION LONGITUDE	E 356.58
ALTERNATE NAMES	Cartuja
DATES OF OPERATION	10/1968 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Photometer, 6300A and 5577A brightness, meridional plane observations, time interval 1/4 h during the night.
RAW DATA	Drawings
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	J. M. Quintana Observatorio Universitario de Cartuja Granada Spain
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	Special purpose data available after 2 months.

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ZVENIGOROD
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ITEM: 1162
DATE:23/02/77

DISCIPLINE ---------- GØ1 Airglow
STATION LATITUDE ---------- N 55.70
STATION LONGITUDE ---------- E 36.80
ALTERNATE NAMES ----------
DATES OF OPERATION --------- 09/1969 to present
OBSERVING SCHEDULE ---------
INSTRUMENT DESCRIPTION ----- Airglow photometer
RAW DATA ----------
DATA REDUCTION PRACTICE ---------- Regular
REGULAR REDUCED DATA AVAILABLE AFTER ------ 3 MONTHS
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ---------- at

DATA AVAILABLE ON REQUEST ---------- Yes
ADDRESS FOR INFORMATION ABOUT STATION -----

Dr. N. V. Pushkov
IZMIRAN
PO Akademgorodok
Moscow Region
USSR 142 092

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS -----

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VICTORIA B.C.

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ITEM: 1093
DATE:25/05/76

DISCIPLINE	G01 Airglow
STATION LATITUDE	N 48.46
STATION LONGITUDE	E 236.70
ALTERNATE NAMES	
DATES OF OPERATION	02/1967 to present Intermittent operation
OBSERVING SCHEDULE	Regular
INSTRUMENT DESCRIPTION	Birefringent Airglow Photometer, observations during clear twilight, strip chart speed 1/4 inch/min, twilight sodium 2/1967-8/1968, twilight lithium 9/1968-present.
RAW DATA	Strip chart
DATA REDUCTION PRACTICE	Special
REGULAR REDUCED DATA AVAILABLE AFTER	MONTHS
FORM OF REDUCED DATA	Tables, graphical plots
DATA ROUTINELY PUBLISHED	
DATA SENT TO WDC-A	
DATA SENT TO WDC-B	
DATA SENT TO WDC-C	
DATA AVAILABLE ON REQUEST	Yes
ADDRESS FOR INFORMATION ABOUT STATION	Dr. H. M. Sullivan University of Victoria Department of Physics Victoria B.C. Canada V8W 2Y2
ADDRESS FOR INFORMATION ABOUT DATA	Same as above
ADDITIONAL COMMENTS	*Special purpose data available after 1 month.*

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7. PAGES FOR NEW ENTRY SUBMISSION

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DISCIPLINE ----------
STATION LATITUDE ----------
STATION LONGITUDE ----------
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION -----
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION -----

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS -----

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ITEM:
DATE:

MONTHS

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DISCIPLINE ----------
STATION LATITUDE ----------
STATION LONGITUDE ----------
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION -----
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION -----

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS -----

ITEM:
DATE:

2

MONTHS

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DISCIPLINE ----------
STATION LATITUDE ----------
STATION LONGITUDE ----------
ALTERNATE NAMES ----------
DATES OF OPERATION ----------
OBSERVING SCHEDULE ----------
INSTRUMENT DESCRIPTION -----
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION -----

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS -----

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ITEM:
DATE:

MONTHS

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DISCIPLINE ----------
STATION LATITUDE ---------- S 0.
STATION LONGITUDE ---------- E 0.
ALTERNATE NAMES ----------
DATES OF OPERATION ---------
OBSERVING SCHEDULE ---------
INSTRUMENT DESCRIPTION -----
RAW DATA ----------
DATA REDUCTION PRACTICE ----------
REGULAR REDUCED DATA AVAILABLE AFTER ------
FORM OF REDUCED DATA ----------
DATA ROUTINELY PUBLISHED ----------
DATA SENT TO WDC-A ----------
DATA SENT TO WDC-B ----------
DATA SENT TO WDC-C ----------
DATA AVAILABLE ON REQUEST ----------
ADDRESS FOR INFORMATION ABOUT STATION -----

ADDRESS FOR INFORMATION ABOUT DATA --------
ADDITIONAL COMMENTS -----

437

ITEM:
DATE:

2

MONTHS